# JOURNEY THROUGH TIME

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# JOURNEY THROUGH TIME

An Introduction to the Archaeology

and Culture History of the MSTW Planning District

Papers in Manitoba Archaeology

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by

C. Gordon Hill

Project Archaeologist

Historic Resources Branch

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## DEDICATION

This book is dedicated to the late Mr. G.G. Enns. Mr. Enns, a member of the Manitoba Archaeological Society, was a competent amateur archaeologist who began to compile his large artifact collection in 1925. Truly a pioneer archaeologist, Mr. Enns spent a considerable amount of time visiting sites, recording detailed information on site locations and informants, and cataloguing his collection by sites. His dedication towards preserving the knowledge of past human occupation of the Winkler area serves as an example to us all.


## ACKNOWLEDGEMENTS

I would like to take this opportunity to thank Mr. Neal Putt, my 1982 field assistant, for his dedicated efforts towards this project. Having spent some years of his youth in Morden, Neal provided much needed contact with local residents and a knowledge of the area that proved to be very valuable to the project. I would also like to thank my 1983 field assistant, Mr. Daniel Nicholson, for his legwork and the interest he showed in the project.

I am grateful for the warm reception given to us by the many landowners, informants, and collectors we contacted during the fieldwork. Without their help, a project of this kind would be impossible. By letting us onto their land to check areas of suspected archaeological significance, they enabled us to gain an idea of the variety of conditions and resources in the Planning District. People who own collections and who could remember exactly where the artifacts were found, or even took the time to accompany us to a site, saved us valuable time. Simply allowing us to see their materials gave us information as to which cultural groups had lived in the area, and roughly when.

I would like to thank the following landowners and collectors for their assistance and co-operation:

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*Project archaeologist Gordon Hill examines the collection of W. Duncan. The excellent co-operation of local residents was of tremendous assistance in the field and instrumental in the preparation of this book.*

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Finally, the author accepts responsibility for any shortcomings of this report.

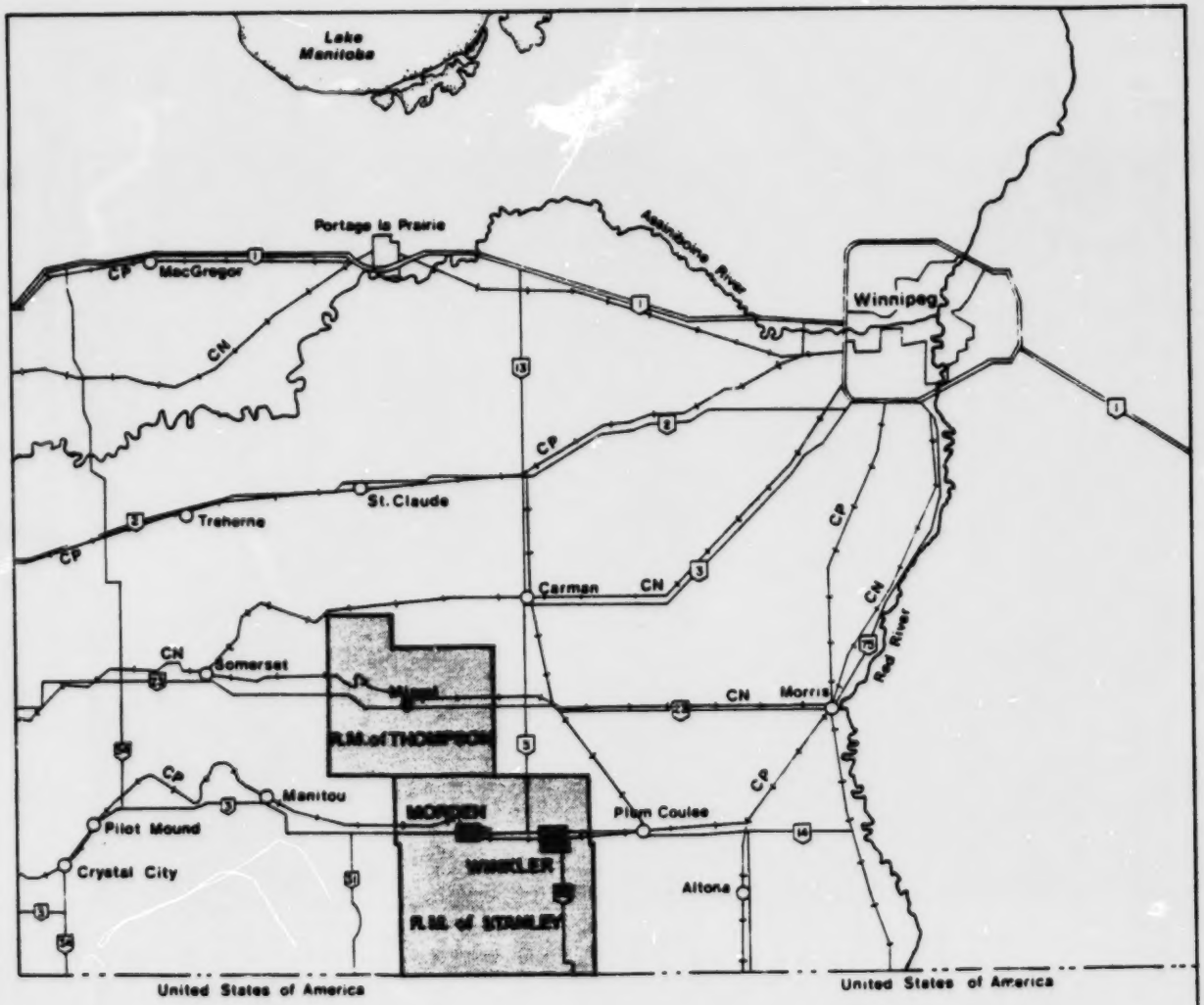
C. G. Hill

## INTRODUCTION

The archaeological survey of the Morden-Stanley-Thompson-Winkler (MSTW) Planning District is part of a long-range programme of archaeological site inventory being conducted by the Historic Resources Branch of the Department of Culture, Heritage and Recreation. Planning district studies are used as a means of adding sites to the "Archaeological Sites Inventory of Manitoba". The inventory is composed of standardized forms for each site, containing useful information for research purposes and for the systematic development of Manitoba's archaeological resources. In addition, every site is plotted on National Topographic Series maps for future reference.

The initial results from the planning district survey show that the Stanley and Thompson Municipalities have a long and colourful prehistory. Only a small portion of the abundant archaeological resources in the district could be sampled during the field work, but the involvement of many local residents and collectors increased the volume of knowledge and information that will be added to the Archaeological Sites Inventory.

This booklet is intended to be a preliminary outline of the prehistory and history of the MSTW Planning District. Wherever possible, information resulting from the field work will be incorporated, but much of the story is drawn from the broad




*Location of the MSTW Planning District within south-central Manitoba.*

region of Southern Manitoba and surrounding areas. It commences with an account of the processes which are believed to have led prehistoric peoples to colonize this area at the end of the Ice Age, and continues with developments of their use of it for the past 10,000 years. Most of the interpretations appearing in this booklet are less than 25 years old; few of them are more than 50 years old. Almost every topic mentioned herein is a subject of ongoing debate among archaeologists, making the discipline a growing, dynamic field of investigation.

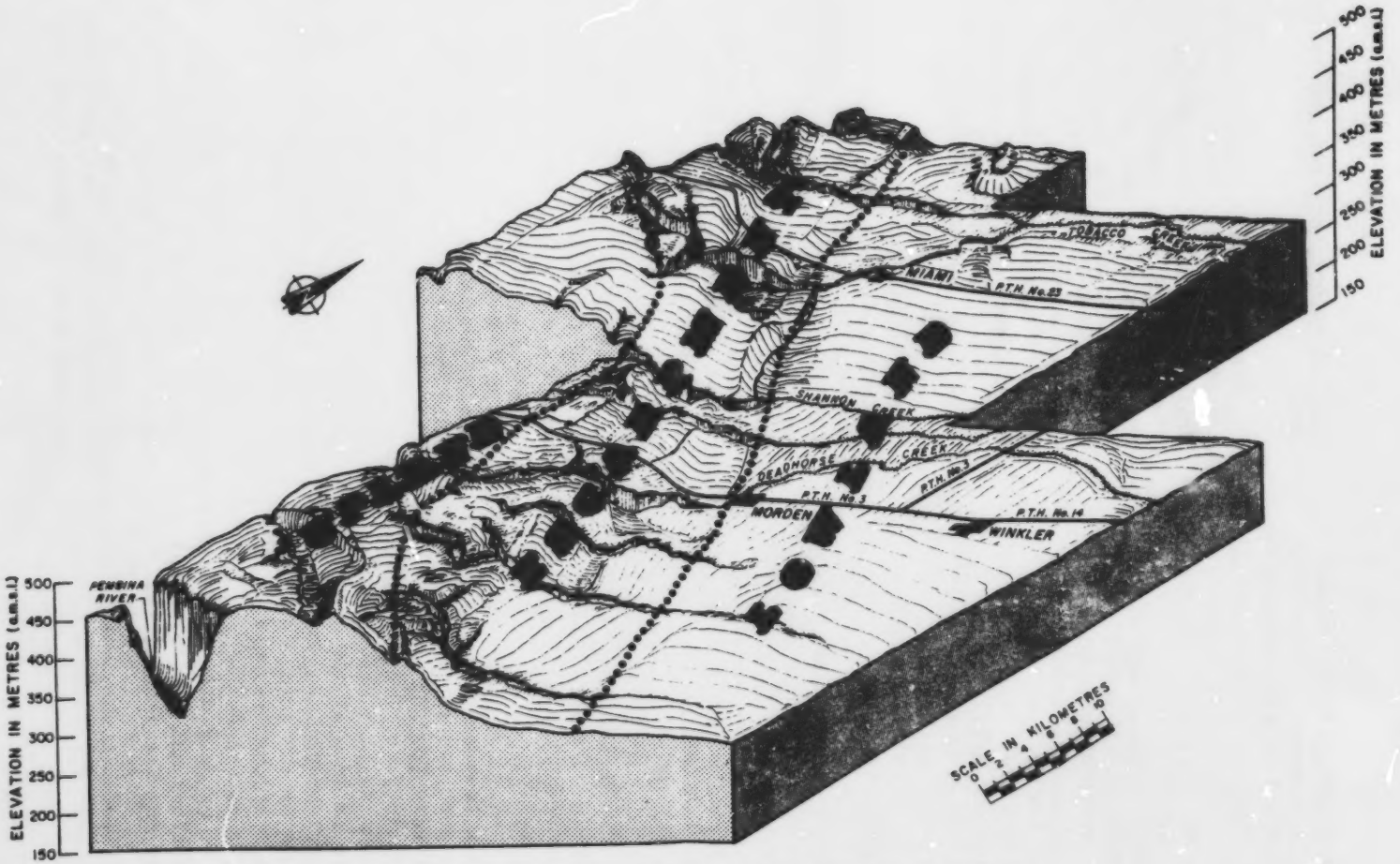
Before we can make detailed statements of how people adapted to and utilized a specific area such as the Planning District, considerable work has to be done on complex problems that require much time and effort. This booklet is an introduction to generally accepted archaeological ideas about human prehistory of interest to residents of the MSTW Planning District.

The main body of this report is divided into two parts: Natural History (p. 24) and Cultural History (p. 37). This has been done so that the reader can acquire an idea of the environmental conditions that faced people in the past, and how human beings adapted to those conditions. Before we begin, however, let us deal with some common questions and notions about archaeology and archaeologists.

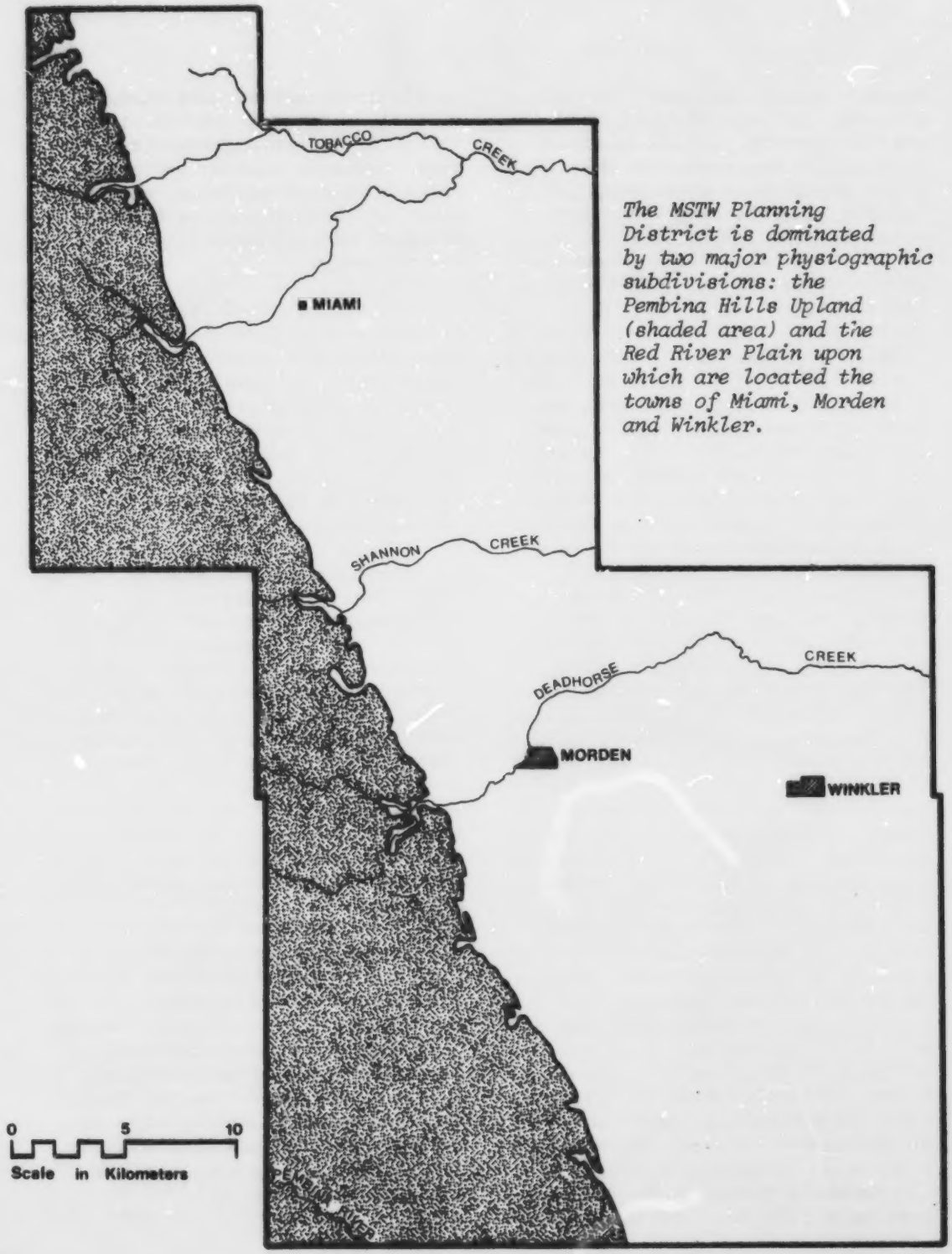
**WHAT IS ARCHAEOLOGY AND WHY IS IT DONE?**

Simply stated, archaeology is the study of past lifeways. Written records of prehistoric people in Manitoba are not available because they did not possess a form of writing. Consequently, archaeology is the only means of acquiring information about our ancient forebears -- how, where and when they lived, and how they adapted to cultural and environmental change. We cannot study outstanding personages or individuals; that luxury is reserved for historians who study societies that left written records. Even then, the historical record is far from complete, and is biased in many cases in favour of persons and events whose records, by chance, happened to be preserved. Much of the archaeological record left in the ground also comes to us by chance. The remains of a campsite that has not been plowed or eroded by wind and water is a rare find in the MSTW District. In fact, most of the sites are found in cultivated fields. The ravages of time have taken a considerable toll of prehistoric cultural remains of the area's first inhabitants. This makes whatever is left all the more important to the student of the past.

The archaeological record, like the historical, is biased. Nothing remains of the language, philosophy, child-rearing practices, political make-up, or the affection that the people had for each other. However, for any




*The major physiographic subdivisions of the MSTW Planning District.*




*The MSTW Planning District is dominated by two major physiographic subdivisions: the Pembina Hills Upland (shaded area) and the Red River Plain upon which are located the towns of Miami, Morden and Winkler.*

human group to function successfully, all of these factors must be present. Thinking of prehistoric Manitobans in these terms brings us a giant step towards understanding them as people. Often collectors, archaeologists, and the general public think and talk about the artifacts left behind to the exclusion of the people who made them. An arrowhead or spear point can be viewed as a relic, part of a weapon, a form of tool that can be used to determine the antiquity of an archaeological site, or all of these things; but such an artifact can tell us much more. It can also be perceived as the handiwork of an intelligent and skilled craftsman who had experience in hunting and killing game -- one who knew what sort of tool was needed to do the job and how to make it. If we, today, can take that step beyond the artifact itself and realize that at numerous campsites the daily life of the people revolved around many difficulties that are similar to our own, we just may find more in common with our predecessors than we thought possible. Although they must surely have had a vastly different world view and lived a much different lifestyle than the people of today, the past population of the MSTW area was part of the Human Family, experienced day-to-day problems, and possessed family and group unity -- as do the people of today. With this view of the study of archaeology, the humanity of our subject becomes clear to us.

Nature's bounty in the MSTW area is a rich one. Although the available resources have changed at various times in the past, and are quite different today from what they were when Native groups alone populated the area, the study of these resources forms a key part of the archaeological process.

Man's need for food, water, clothing and shelter is universal. How people satisfy those needs is based on the resources available within their environment; how they decide what resources are useful to them, and how they choose to use those resources is based on their customs, or "culture".

The long range weather conditions (climate) of the area are also important considerations in the study of prehistoric peoples. Fluctuations in temperature and moisture cause marked changes in both plant and animal populations present in the area. These changes can affect man's hunting and gathering methods dramatically. For example, resources that have traditionally been the main form of food can become scarce, or even disappear. Conversely, food resources that have been scarce can become important due to an increase in variety and volume. These kinds of major changes can be visible in archaeological sites of the area. A major increase or decrease, over a long period of time, in the type of animal bones or seeds found at sites can indicate adjustments that the people had made to new conditions and food resources.

Major climatic changes can also lead to population shifts, since such changes can affect very large areas. Groups of people may move long distances trying to find the game that they have traditionally hunted. Successful groups that grow in size may be forced to split up so that local food resources are not over-exploited. These movements show up in the archaeological record in the form of different tools and weapons appearing in areas where formerly no such artifacts were found.

It is best in some ways to view the past population of the area as a series of distinct groups that may or may not have been directly related to each other in culture and/or time. In this way, the coming of the Euro-Canadians to the area can then be seen as yet another new culture attaining residency in the area, displacing or replacing an indigenous one.

People are also inventors, innovators, and borrowers of ideas. In their attempts to better their lives, new ideas are frequently being considered and tested. Many are rejected but some become part of the way of life, or customs, of a people. The introduction of pottery-making and the bow and arrow are examples of major innovations that happened in our area some 2000 years ago, and were used by local residents up to and beyond the coming of the Europeans.

The early populations of the MSTW area did not live in isolation. Whether through conflict, trade, migration, or exchange of members from one population to another, new ideas and concepts were learned and adopted. Evidence of exchange and trade is found throughout Southern Manitoba. Copper from Lake Superior, obsidian (volcanic glass) from the Rocky Mountains of Wyoming, and shells from the Pacific Ocean and Gulf of Mexico have been found in the archaeological sites of the region. These items, while generally common in their place of origin, no doubt became more valuable as the distance from their sources increased. What the people of Southern Manitoba traded for these items is not known at the present time. Their presence does show, however, that contacts were made over great distances. It is not clear whether these contacts were direct, or if an intermediate group or groups was/were involved. The latter is likely the case.

It is hoped that the preceding paragraphs have dispelled any notion that the early residents of the MSTW area were backward "primitives" who lived in a small, isolated area. Indeed, the opposite is true; the early cultures that have been recognized in the area were both conservative and dynamic, according to circumstances and opportunity. The peoples of antiquity learned to deal with the problems of making a living successfully. The testimony of their success can be seen in the thousands of years of prehistory recorded in the area to date.

As archaeologists continue to glean information from prehistoric sites, further insights into the lifeways of the first residents will be gained. However, the archaeological record of these peoples is a fragile one, requiring protection and preservation so that further study will be possible. The following quotation from Dr. Charles R. McGimsey III on the fate of archaeological sites and heritage resources in the United States is true of Manitoba and the rest of Canada as well:

> The next fifty years - some would say twenty-five - are going to be the most critical in the history of American archaeology. What is recovered, what is preserved, and how these goals are accomplished during this period will largely determine for all time the knowledge available to subsequent generations of Americans concerning their heritage from the past. It is incumbent upon all persons knowledgeable about or interested in archaeology, to whatever degree, to do their utmost now to insure that the maximum amount of critical data is preserved. Our generation cannot postpone the decision toward this preservation, for the forces of destruction are multiplying and gaining momentum. The next generation cannot study or preserve what has already been destroyed (McGimsey 1972:3).

Archaeological sites, like oil and minerals, are finite resources. One cannot re-make or regain information from a destroyed or vandalized archaeological site, and it is hoped that archaeological studies will continue to shed new light on Manitoba's early residents. We owe that to the future as much as to the past. To that end, all residents of Manitoba share the responsibility of protecting the cultural heritage left to us by our predecessors.

**Archaeologists**

Probably the first picture that comes to mind when archaeologists are mentioned is one we remember from the movies. Usually, the image is that of an older bearded gentleman in search of great treasures in an Egyptian tomb, with danger and intrigue lurking all around him. While there certainly are archaeologists working in Egypt, the movie characters can be somewhat misleading, to say the least.

The men and women who do archaeology possess a wide range of interests and come from a broad spectrum of scientific backgrounds. Some have entered the field with training in chemistry or physics and have seen an opportunity to study prehistoric sites using the natural sciences. Others may

contribute their skills as mathematicians or computer experts to solve complex problems using large numbers of apparently unrelated data. Many come from the fields of botany, geography, biology, and environmental studies, using their skills to interpret information on natural history, climatic change, or past communities of plants and animals.

Others may be interested in developing new methods of excavating archaeological sites or surveying areas that will add to our knowledge of past occupations in a given region. Thus, archaeologists do not all come from the same mold. Some have more in common with other scientists than they do with each other. However, all have an interest in some aspect of the past and use each other's information to help overcome limitations in individual backgrounds. This is true whether the study area is China, Australia, or Manitoba. Clearly, this range of expertise and the exchange of information allows a group of archaeologists to delve much more deeply into their subject than could any one individual.

**What Do Archaeologists Do?**

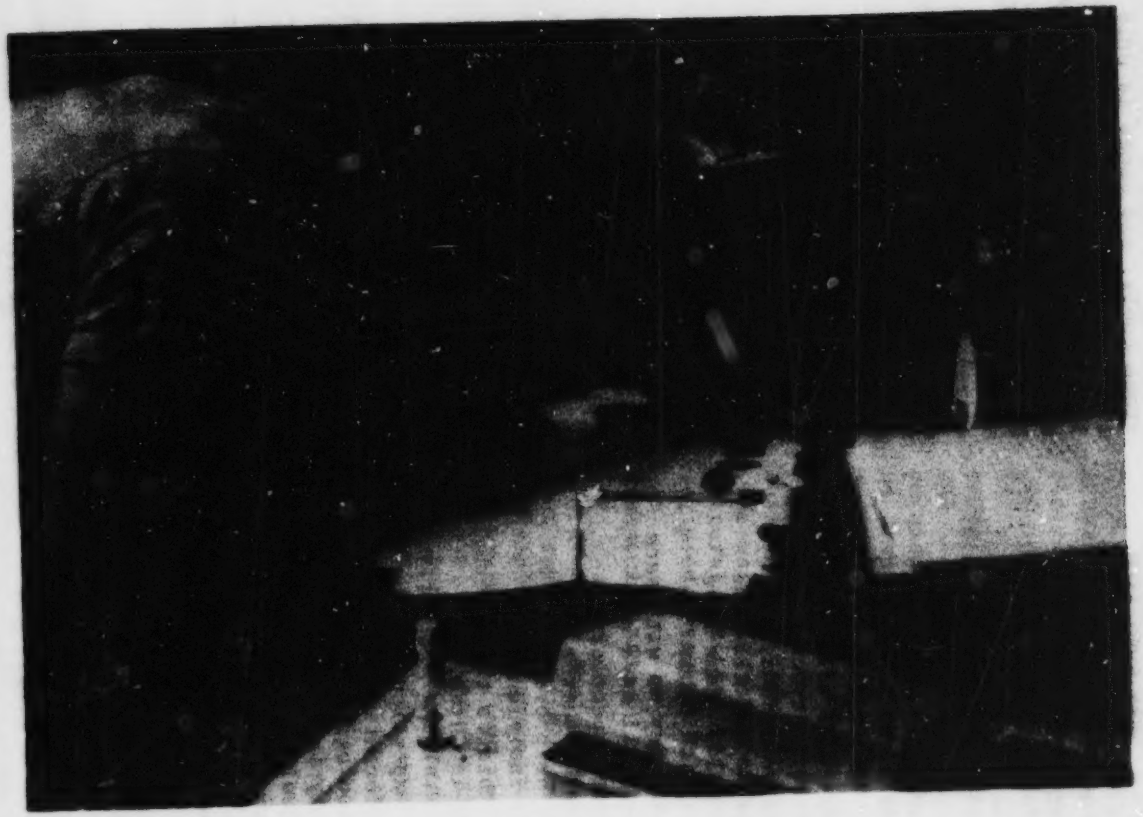
The study of archaeology is the study of past peoples. Archaeologists attempt to reconstruct as much as possible of the lifeways of the people who formerly inhabited an area. Archaeologists see the information and artifacts that are collected as means to an end, namely, a better understanding of those past times and peoples.

The collection of pot sherds, stone tools, and bones is only a small part of the overall process involved in archaeology. To do a credible job, knowledge of the past climate, geological history, and past plant communities and animal populations form a major part of the work, as we shall soon see. This information must be inter-related with the artifacts and features left by the human population. An archaeologist is not simply interested in collecting artifacts for the sake of collection; the value of artifacts lies in the heritage information they can give.

**The Value of Artifacts**

The true value of an artifact is perceived by the archaeologist in terms of the knowledge it provides. The information value is in turn directly related to the specific spot in which the specimen was found and how it relates to other artifacts in the area. If that knowledge is lost, the artifact becomes virtually, if not totally, useless as a source of information about the past.

Unfortunately, some people are willing to buy or trade artifacts and as a result, specimens are taken from the province before they are recorded by an archaeologist. Others may become part of a collector's showcase, but if they are not properly labelled and recorded, they are of little use in studying the past. It is tragic, that with the



*Assistant Neal Putt catalogues artifacts in the field "lab" -- the back of the project van.*

exchange of a few dollars, an important part of our knowledge of the past can be irretrievably lost. We will likely never know how much of our heritage will forever be denied us due to this sort of activity. It is our hope that, with increased awareness of the heritage value of archaeological sites and objects, there will be increased emphasis on the preservation and conservation of them at the local level.

**Dinosaurs, Sharks' Teeth and Archaeologists**

The last dinosaurs became extinct many millions of years before the advent of man. The fossil shells, bones, and sharks' teeth found in the shales of the Manitoba Escarpment were laid down several hundreds of millions of years ago. Scientists who study these fossil remains are called "palaeontologists". The study of dinosaur fossils falls outside of the realm of archaeology.

**How Deep Do Archaeologists Dig?**

This question is probably the most common one asked of archaeologists. Quite simply, there is no absolute rule or "correct" answer. Some sites on the open prairie are at shallow depths because there has been little soil build-up since the end of the Ice Age. Other sites, perhaps in a regularly flooded area, may be several meters below surface due to the silting effect of the river. Each site and situation is different and must be approached on its own terms.

**How Were Stone Tools Made?**

Everyone who has found an arrowhead or spear point has likely wondered how it was made. Popular misconceptions about making stone tools vary from dropping hot water on the edges to remove flakes, to "filing" the edges down to achieve the desired shape.

Flintknapping is an exacting process requiring skill and ability. The first step in making a chipped stone tool is to acquire the right kind of raw material. Not just any rock will do; it must be hard and durable, yet not brittle. It has to break in what are called "conchoidal" fractures when struck, and have few or no flaws. An example of a conchoidal fracture is a beebee hole in glass, where the break spreads out from the point of impact in a cone-shaped pattern. The types of stone used by prehistoric flintknappers are a variety of cherts and chalcedonies. Perhaps the best material for flintknapping is a volcanic glass called obsidian. The most common raw materials used by early residents of the MSTW District are "Knife River Flint" and "Swan River Chert". Knife River Flint is actually a brown chalcedony found along the Knife River in North Dakota. It is excellent material for making chipped stone tools. Swan River Chert is sometimes called a quartzite. It is found as cobbles in glacial till and river valleys, as well as being scattered in fields throughout the MSTW area. Swan River Chert varies a great deal in

*Chipped stone knives of Knife River Flint from the Miami area. Natural size.*

quality from useless rock to flawless material for making stone tools.

The next step is to remove a large flake from the cobble, or "core". This is usally done by preparing a "platform" on the core, which is then hit with a hand-held rock called a "hammerstone". Since the platform must be struck at a certain angle and with a certain amount of force, it often requires several attempts before a suitable flake is produced. The removal of flakes by striking the core of rock with another rock, bone, antler, or wood is called "percussion flaking".

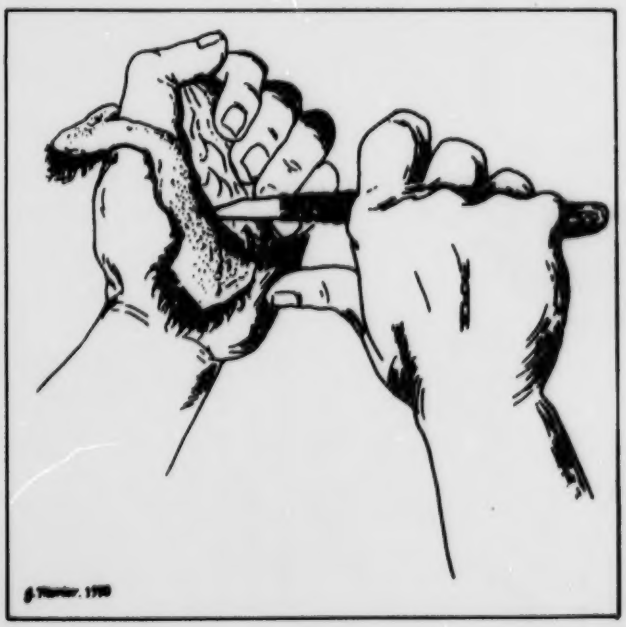
Once the blank flake is obtained, it is percussion-flaked so that it becomes thinner and begins to assume the shape of the desired tool. Spear points and arrowheads are often subjected to another flaking procedure called "pressure flaking". This involves placing the tip of an antler on the edge of the artifact and exerting pressure until a small flake is forced off. Pressure flaking is a finishing process that is used to straighten and sharpen the edges of a tool. At any point in the flintknapping process, a misplaced blow or a flaw in the rock can cause breakage, forcing the craftsman to start again. It requires quite a bit of practice to become acquainted with the materials being used, and to become skilled enough to produce a certain style of projectile point or other flaked stone tool.

The early residents of Manitoba used other methods to produce stone tools. One of these, called "pecking", produced one of the most frequently found classes of stone artifacts in the MSTW District, called "grooved mauls". Crooved mauls are usually round or oval cobbles of granite or gneiss. They were made to be attached to a wooden handle and used as hammers or mallets for any number of purposes, from grinding seeds and cracking nuts, to pounding stakes, or breaking open animal bones to expose the marrow. The groove was made by continually pecking away at the rock until a furrow was formed.

Axes and adzes were made by pecking and "grinding", and "polishing", using stones that were not suitable for flaking, such as slate, granite, basalt and others. First, a piece approximately the required size was knocked off a block, or else a river cobble was selected and roughly shaped by percussion. Then, the surface was continually pecked with a hammerstone, pulverizing the surface until eventually the tool was recognizable. It was then ground on an abrasive surface -- a sandstone slab, for example -- giving the tool its finished shape and sharp edge. The final stage was the polishing, using a damp piece of leather and sand, or a fine sandstone. Ground stone tools are not common in the MSTW District, although a few were observed in local collections.

*Two methods of percussion flaking: Top -- the anvil, or "bi-polar" technique; Bottom -- free-hand percussion.*

*Two variations of pressure flaking. The work depicted in the lower picture is more vigorous than that shown above, and a protective leather pad is used to protect the worker's left hand from the sharp point of the flaker and the sharp flakes that are driven off.*



*Results of prehistoric stone tool technology that are not often recognized as such by the untrained eye. Natural size.*

*In prehistoric times, holes may have been drilled in stone by means of the bow-drill (left) or with the aid of a mouthpiece and thong (below).*

## How Long Have People Lived in the MSTW District?

It is difficult to imagine 10,000 years of occupation and use of the MSTW area, although this estimate is likely quite accurate. Reference points are needed if we are to reflect upon such a great expanse of time. One hundred years ago, in the late 1880s, the first Euro-Canadian settlers began farming the area. The first people were here 100 times as long ago as that. If a generation is some 25 years, then 400 generations of people have used the resources of the MSTW District. If one's grandfathers or great-grandfathers are considered to have been "early" settlers, we can begin to realize that 400 generations is a very long time indeed.

## Indians and the Horse

The image of an Indian brave mounted bareback on a horse, spear or bow and arrow in hand, is the popular image of the Plains Indian. While this conception is likely accurate for the last 150 years or so of Native dominance of the North American Grasslands, the domesticated horse was actually a late addition to Plains Indian culture. The horse brought major changes to the lifeways of the tribes that possessed it, but the duration of its use was a comparatively short one. Through the vast expanse of prehistory, the Natives of the MSTW area made their way about on their own two feet.

## Battlegrounds, Warpoints, Birdpoints, etc.

Often, while conducting a survey, the archaeologist will hear of a site that is described as a battleground or the scene of a former massacre. The rumour of this battle is usually quite widespread and is often considered to be fact by local residents. Undoubtedly battles and conflicts did occur. More often than not, however, the "battleground" in question can be shown to have been something else -- usually a large campsite -- but because of the large number of projectile points found there over the years, the rumours of war have arisen. When an archaeologist visits the site, he or she typically finds quantities of other tools, flakes and animal bone -- usual indications of a campsite -- and the "battleground" theory is readily dismissed.

The war theory is often promoted by the notion that the arrowpoints from the site are "war points" because they are large enough to kill a man, but too large for a rabbit or bird. In fact, very small projectile points have been found within the skeletons of bison, and there is no question that they were used to kill the animals. Collectors often call these small points "bird points". However, there is little doubt that the size of an arrowhead was not the major factor in deciding the use to which it was put. Rather, the hunter's skill at hitting a vital spot and the force behind the shot were the main factors in killing an

animal. There is no reason to define "war points" or "bird points" as specific types of projectile points used in the MSTW District.

**Pemmican and Tuckahoe**

When clearing land for cultivation, farmers often come across a large fungus called "tuckahoe" in the roots of poplar trees. This fungus is frequently taken to be pemmican, a mixture of pounded and dried meat, grease, and berries that was sewn into leather bags for protection and storage. Although pemmican will last for a considerable time and was sometimes cached for future use and subsequently forgotten, it is highly unusual for any food product to last for 100 years or more in the soils of the MSTW District. Few if any of the pieces of "pemmican" in collections or museums are the real thing; rather, they will most certainly be pieces of tuckahoe.

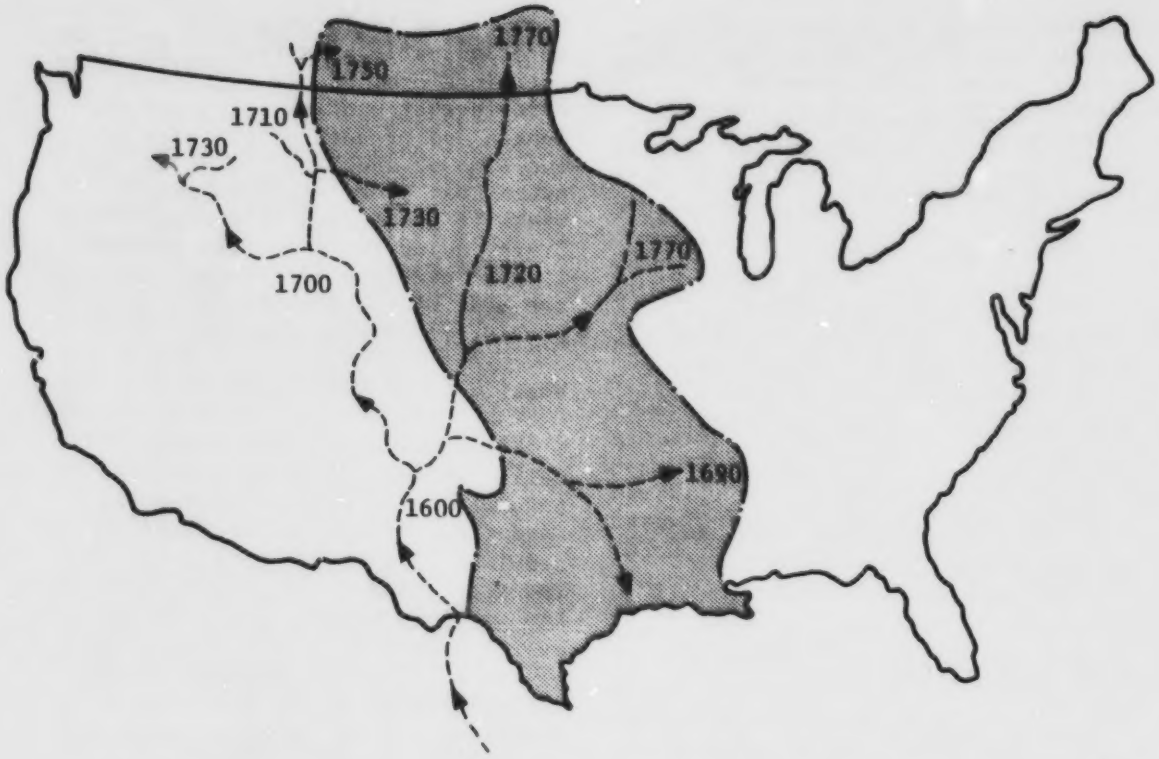
**Was My Land Occupied in Prehistoric Times?**

It is usually a pleasant and interesting surprise for a landowner to find out that there is an archaeological site on his land. It is likely that most quarter sections in the MSTW area have some early material scattered over a knoll, or beside a dry creek or slough. Often, after walking a field, we would show the landowner the results of our efforts. Much of what we found were waste flakes and debris from the making of chipped stone tools, rather than the tools themselves. Such refuse is largely unrecognizable as artifacts to the untrained eye. It is relatively certain that hunters traversed the length and breadth of the area at one time or another. It should be noted that every site, no matter where it is located or how small it is, holds the potential answer to some question concerning the use made of the area by prehistoric Native peoples.

**What to Do If You Find a Site**

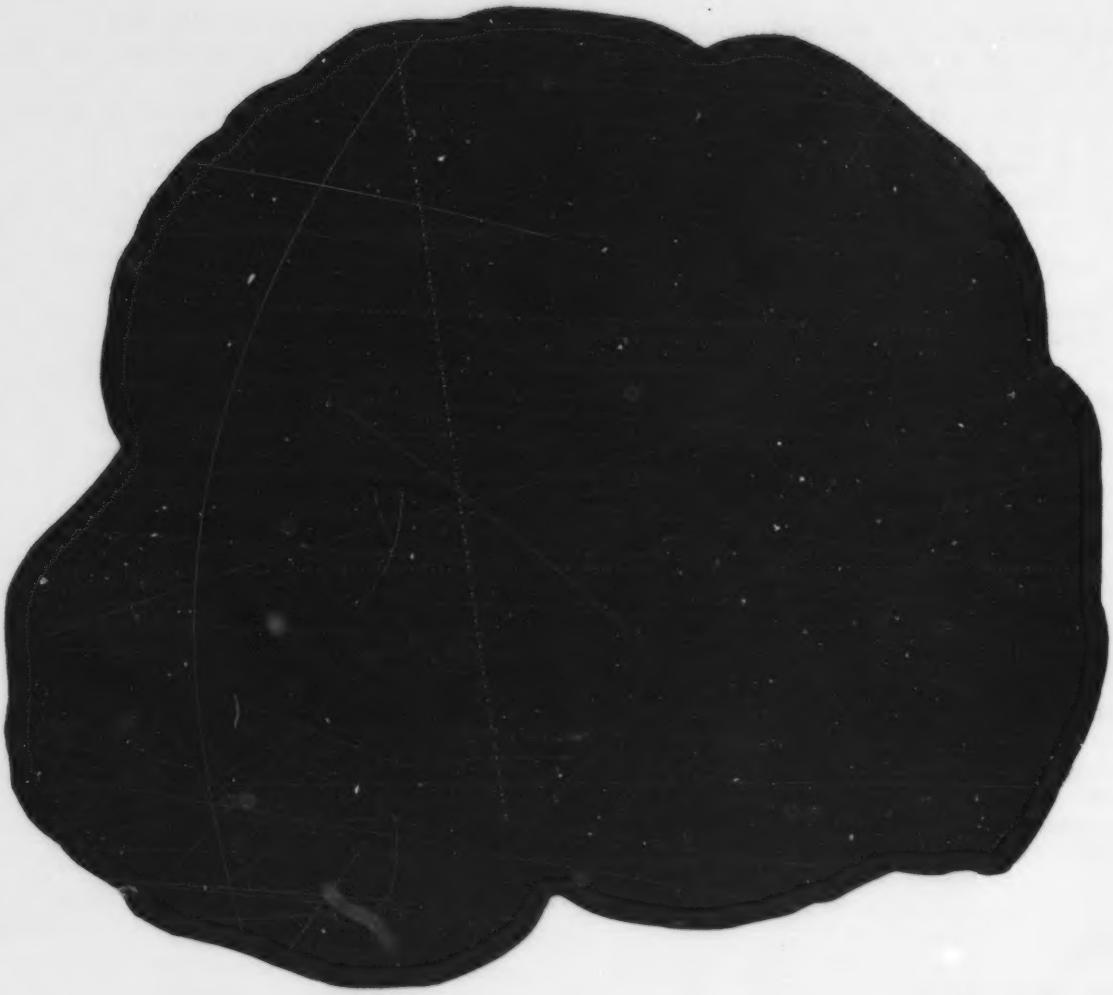
Archaeologists have always relied on the public to provide information on the archaeological resources of their area. The province of Manitoba is too big and the number of archaeologists too small to permit survey of the entire area all by themselves. If we are to continue learning about the prehistory of the province, there must be co-operation between the public and the archaeologists.

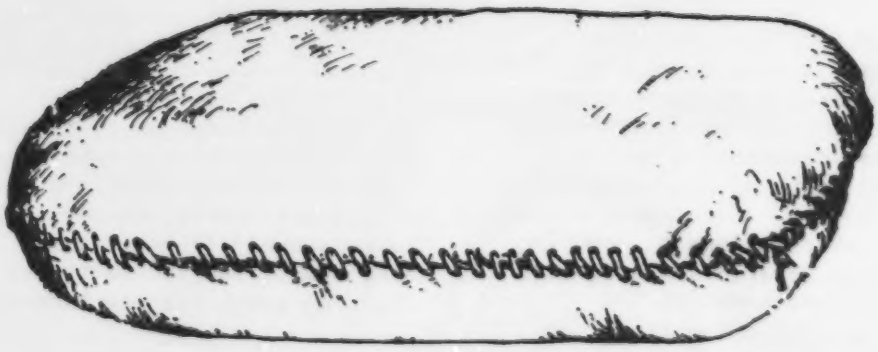
When you find a site on your land, or if you have an artifact collection from your area, we would like to hear about it. Within your site or collection may be information that could be of great importance in writing a chapter on the prehistory of the province. What we ask you to do is not difficult and does not involve a lot of work. A photograph or drawing of the material and a brief description of the site location, including an accurate legal description (1/4 section, township and range) will allow us to pinpoint the site. If a survey is done in that area at a later date, or the information you send is of particular




*This map depicts the spread of the horse over the Plains region (shaded area) of North America during the Historic Period. Note that it did not appear in Southern Manitoba until around 1770.*

*Tuckahoe Fungus (top figure). Frequently mistaken for pemmican, this fungus is found in the roots of poplar and willow trees. Note the wrinkling of the dry specimen. Often the impressions of roots are seen on the tuckahoe exterior, and stones and pebbles are found partially grown over by the fungus. This example is 21 cm wide. The accompanying drawing of real pemmican, sewn in a leather bundle, illustrates the difference between it and tuckahoe.*





significance, an archaeologist may then wish to visit and more fully study your find. At the very least, you will receive a letter of thanks and can be assured that your information has been dutifully noted. We would like to hear from you!

We would like to say a few words about arrowhead-collecting, however. If only selected "goodies" are picked up, the relationship of the full range of artifacts and features is lost. If you have reason to believe that most or all of a site is undisturbed, we urge you to leave it as you find it (definitely not an easy thing to do), and report it to us as soon as possible. Please do not dig or in any way alter the site; you may destroy important information that you do not recognize as being of scientific value. If you decide that you would like to play a more active role in archaeological resource conservation in your district, instructions and guidance are readily available from the Manitoba Historic Resources Branch.

## NATURAL HISTORY

### Deglaciation and Lake Agassiz

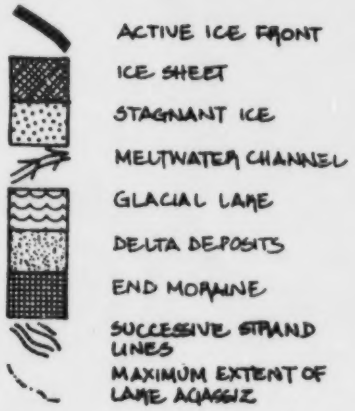
Clearly, a most important sequence of events in central Canadian natural history was the glaciation during the Pleistocene Epoch that commenced about 3,000,000 years ago. During this period, much of North America was covered several times by ice sheets that scraped and scoured the landscape, creating the present terrain. The final, or "Wisconsinan", glaciation disrupted or buried most of the deposits laid down by previous ice advances in Manitoba. This "continental" glacier consisted of a thick dome of ice that expanded under the pressure of the heavier central portion that accumulated in the north. The outer edges would also "retreat" during phases of relatively warm temperatures, with meltwater forming glacial lakes if there were few or no channels through which the water could drain. Alternate periods of ice advance and retreat occurred according to climatic variations and local topography.

The largest glacial lake to involve the MSTW area, Lake Agassiz, began to form after the Wisconsinan glacier started its final retreat around 13,000 BC. The various stages of intermittent withdrawal of the glacier, and subsequent raising and lowering of the water levels of Lake Agassiz, are represented by beach ridges that extend across the Manitoba landscape. These beach ridges are composed of sand and gravel, indicating the former shores of Lake Agassiz during stable periods. Many of these features are visible within the MSTW Planning District.

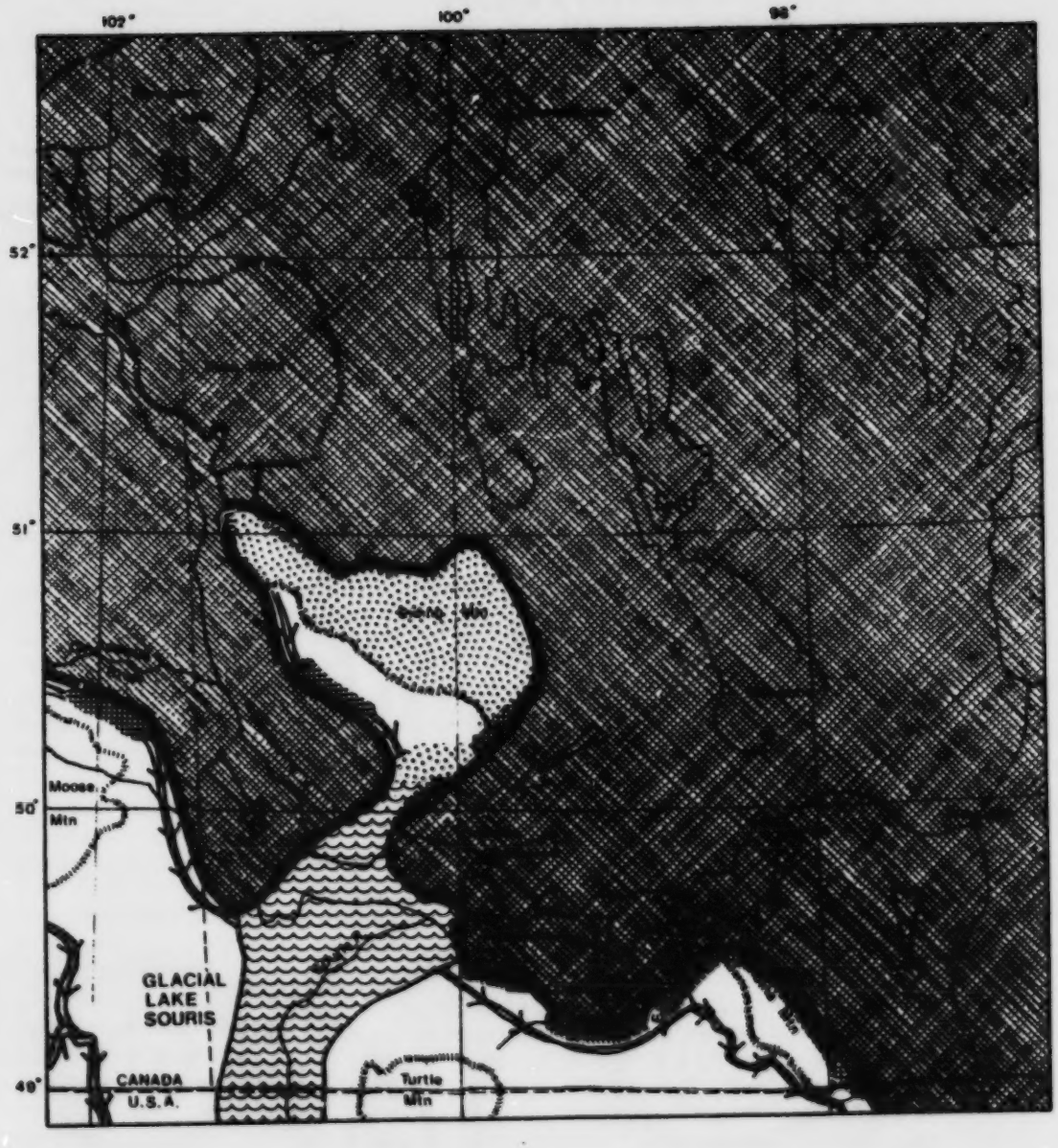
The history of Lake Agassiz begins in North Dakota and Minnesota about 10,000 years BC. Reactivation of the glacier resulted in a southerly expansion of the Red River ice lobe about 9300 BC. During continued melting of the ice sheet, the first of three phases of Lake Agassiz developed, with the meltwater draining south via the Minnesota

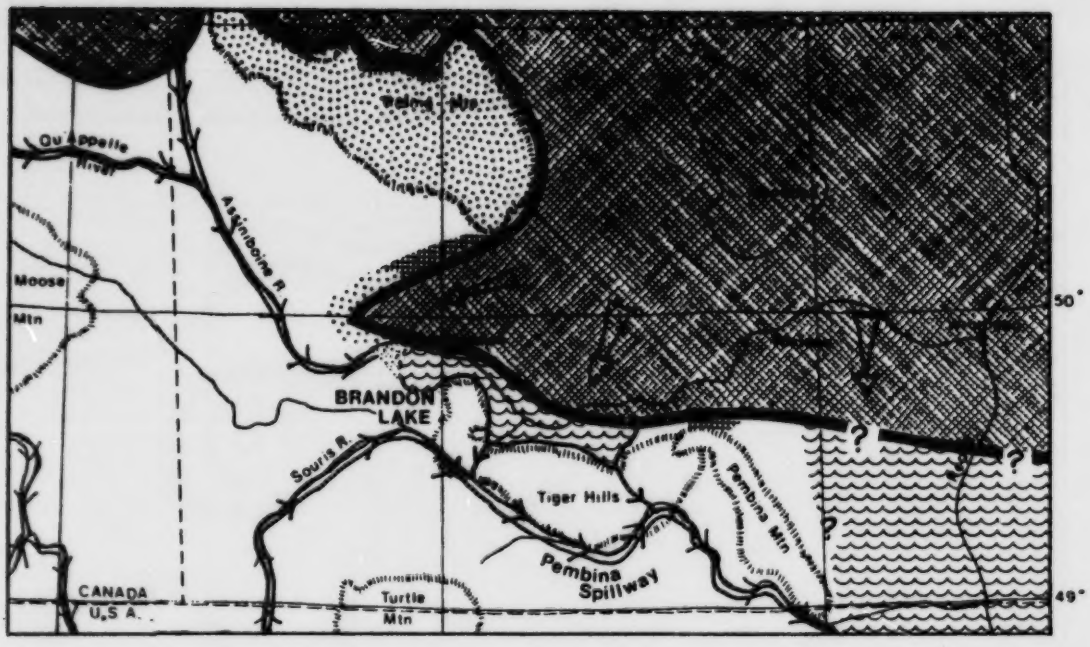
# SOUTHWEST MANITOBA

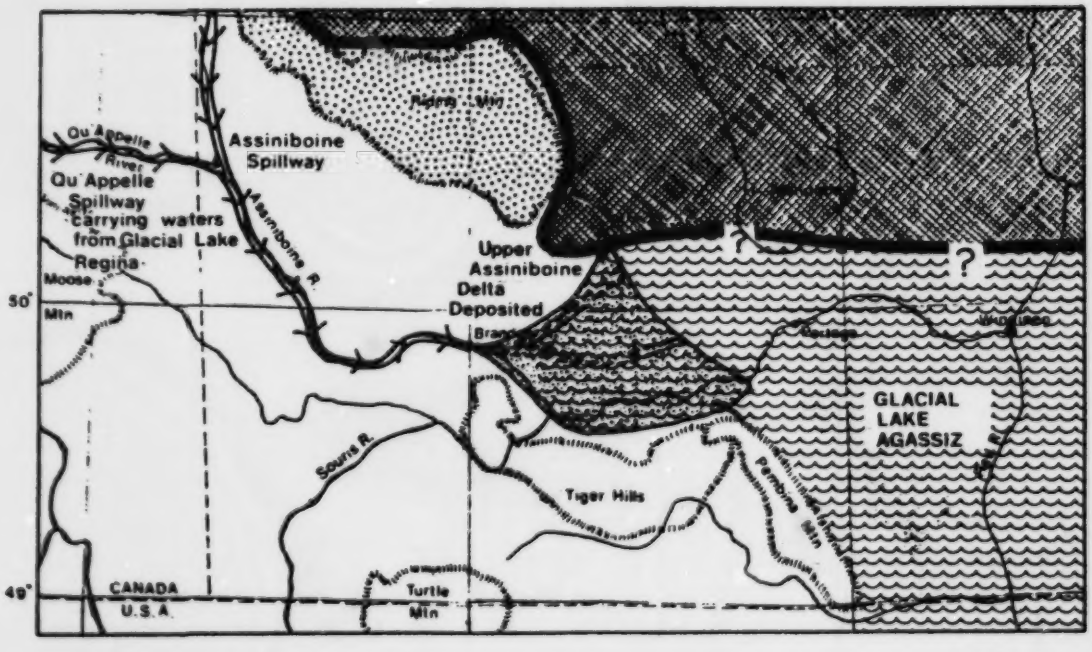
## Glacial History and Delta Formation

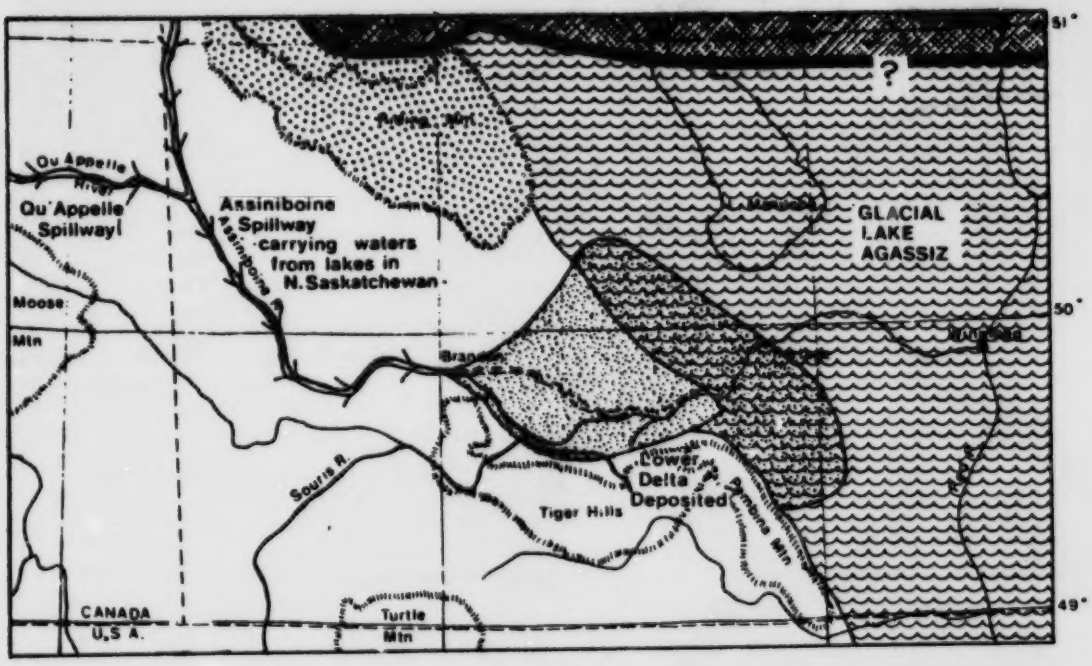


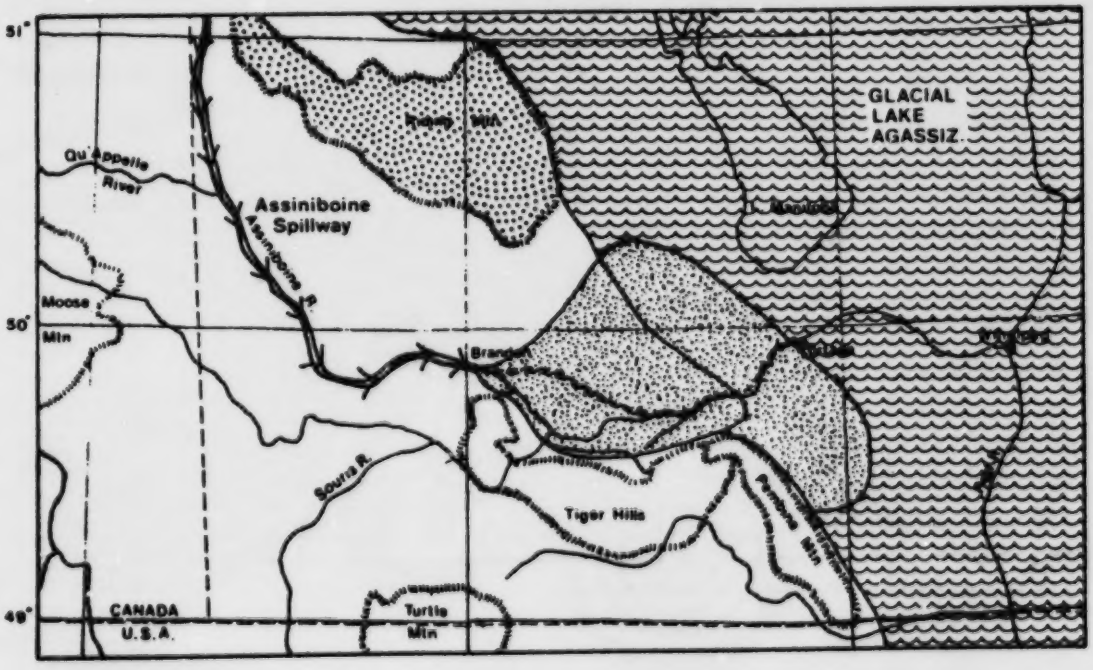

*The following six diagrams depict Southern Manitoba as it appeared between 9500 and 9000 BC -- most of the Clovis period. Note the marked changes that took place, particularly as regards the relationship between the ice sheet, Lake Agassiz, and what is now the MSTW Planning District. The key provided above will assist you in reading the maps.*

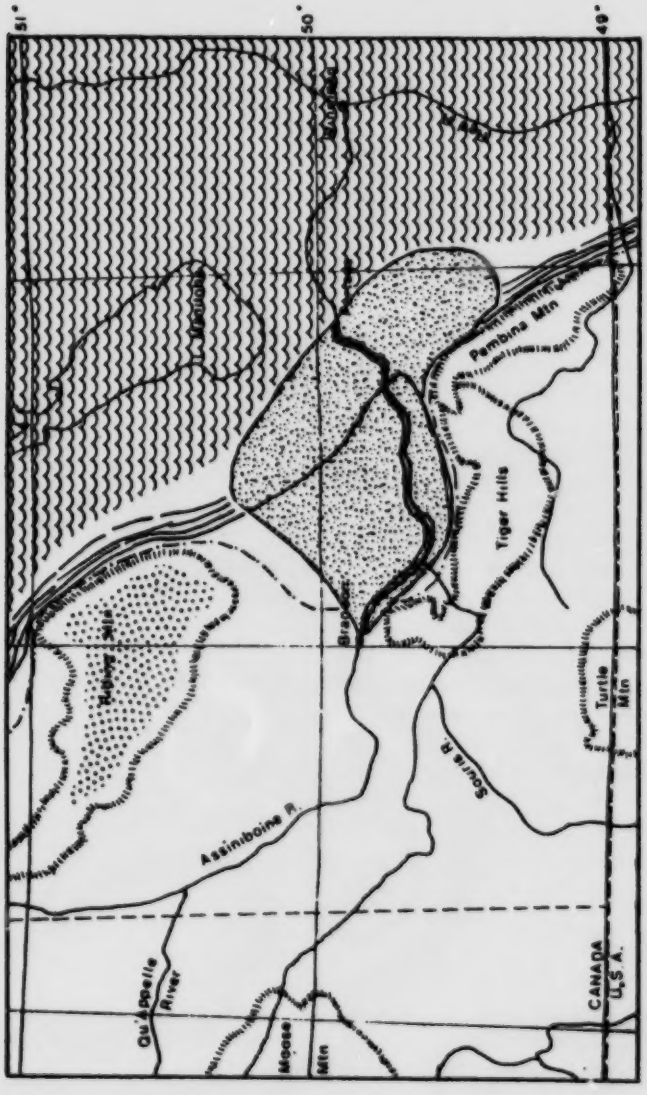

102°
100°
98°
52°
51°
50°
49°
Moose
Mtn
GLACIAL
LAKE
SOURIS
CANADA
U.S.A.
Turtle
Mtn


Qu'Appelle River
Assiniboine R.
Moose Mtn
BRANDON LAKE
Souris R.
Tiger Hills
Pembina Mtn
Pembina Spillway
CANADA
U.S.A.
Turtle Mtn
50°
49°
?

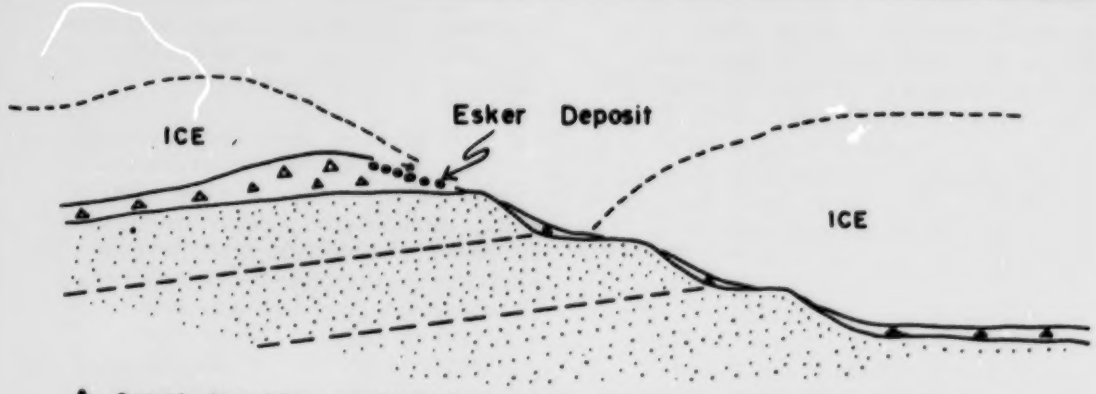

Qu'Appelle River
Assiniboine Spillway
Qu'Appelle Spillway carrying waters from Glacial Lake Regina
Assiniboine R.
Moose Mtn
Upper Assiniboine Delta Deposited
GLACIAL LAKE AGASSIZ
Souris R.
Tiger Hills
Pembina Mtn
CANADA
U.S.A.
Turtle Mtn
50°
49°
?


51°
?
Riding Mtn
Qu'Appelle River
Qu'Appelle Spillway
Assiniboine Spillway carrying waters from lakes in N. Saskatchewan
GLACIAL LAKE AGASSIZ
Moose Mtn
50°
Brandon
Lower Delta Deposited
Souris R.
Tiger Hills
Pembina Mtn
CANADA
U.S.A.
Turtle Mtn
49°

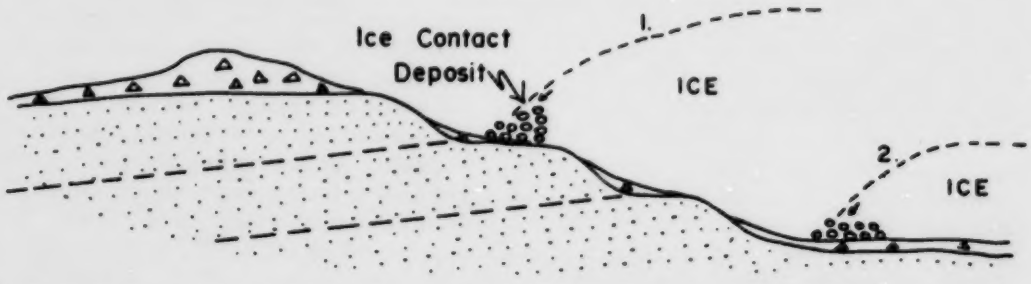

51°
Riding Mtn
GLACIAL LAKE AGASSIZ
Qu'Appelle River
Assiniboine Spillway
Moose Mtn
50°
Brandon
Souris R.
Tiger Hills
Pembina Mtn
CANADA
U.S.A.
Turtle Mtn
49°


51°
50°
49°
Riding Mtn
Duck Mtn
Pembina Mtn
Tiger Hills
Turtle Mtn
Souris R.
Assiniboine R.
Qu'Appelle River
Moose Mtn
CANADA
U.S.A.

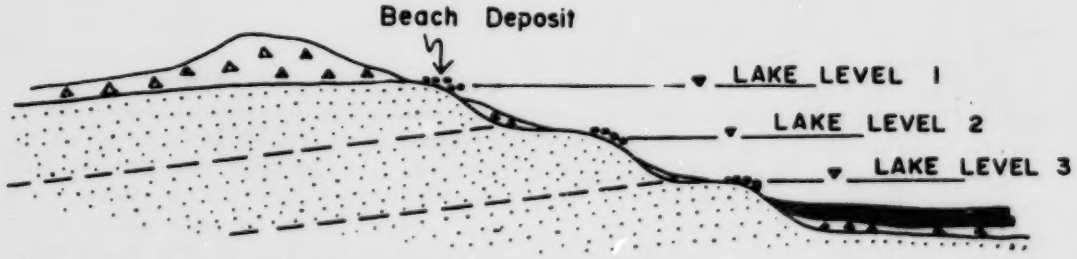
*Geological processes of the last Ice Age laid the foundation for the numerous natural and cultural events that were to be played out in the MSTW District after the ice disappeared. Initially, the movement and subsequent thinning of the ice that covered the escarpment zone and the adjacent plains produced mixed deposits of glacial debris, or "till" (A). The wasting of the ice on the uplands to the west of the escarpment resulted in numerous hills with intervening hollows which filled with water to form sloughs. Streams flowing within and beneath the ice deposited "eskers" (A) which, after the ice had disappeared, appeared as shale-rich gravel ridges on the escarpment. Ice contact deposits known as "kame deltas" and "kame terraces" (B) formed as the ice melted back from the pre-existing bedrock ridges of the escarpment. Because they were laid down in contact with the ice front, the kame deposits, which mainly comprise gravel, also contain pockets of till. With the extension of Lake Agassiz into our area, the till and pre-existing kame material was reworked into beach ridges (C).*




**A.** Gravel deposition resulting from esker deposited from stagnant ice on escarpment.




**B.** Gravel deposition resulting from ice contact / meltwater activity at different levels along the escarpment.




**C.** Gravel deposition resulting from reworking of till and ice contact features by waters of Lake Agassiz.

GRAVEL
CLAY
TILL
BEDROCK
WATER FLOW →
WATER LEVEL —▼—
PRESENT GROUND LEVEL —

and Mississippi rivers. This phase is represented in Manitoba by the "Herman", "Tintah", and "Norcross" strandlines. Near Morden, the Herman strandline varies between 386 and 420 metres above sea level (a.s.l.). Near Miami it stands at 445 metres a.s.l.

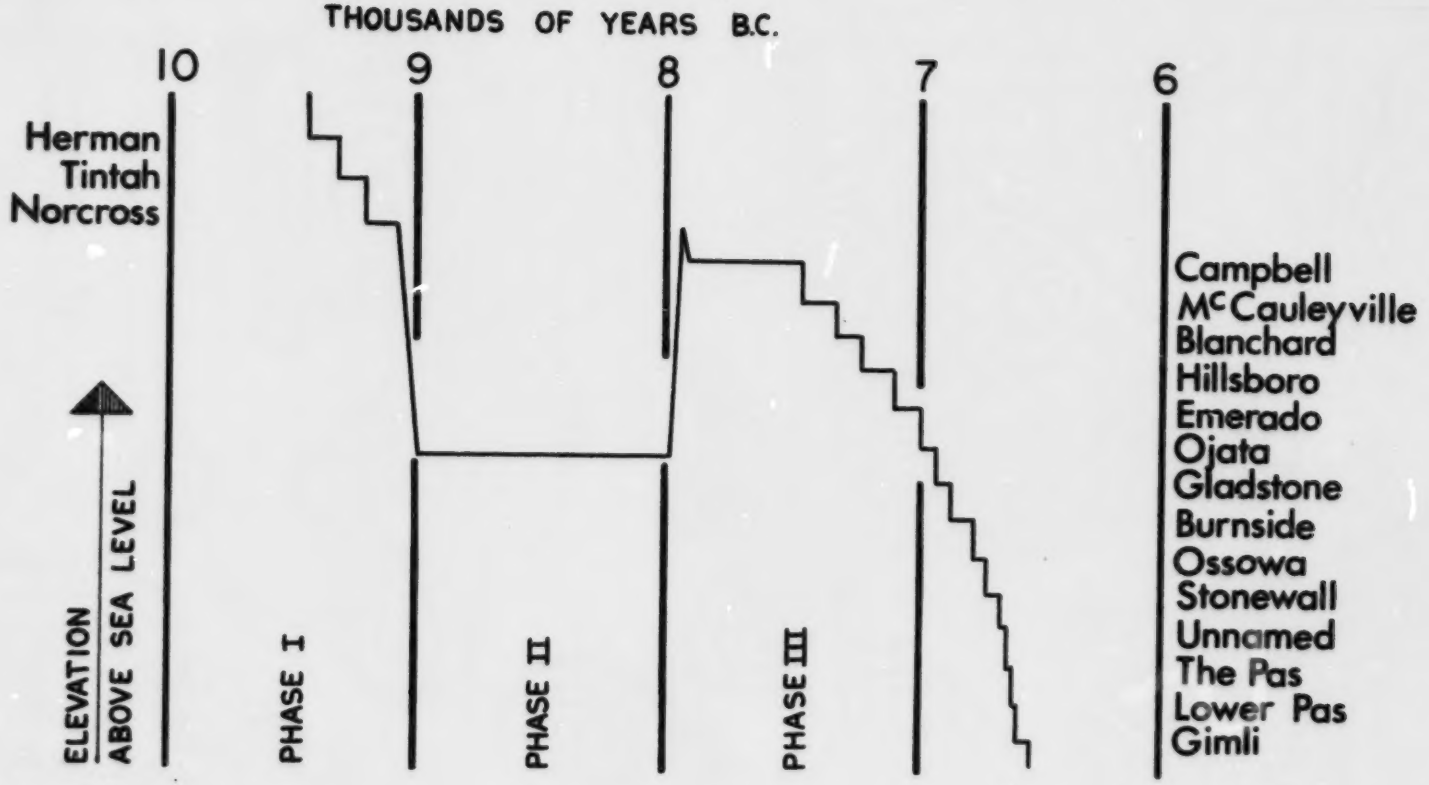
The earlier strandlines represent a period (Phase I) when Lake Agassiz drained southward through Minnesota. Then, due to a retreat of the ice in Northwestern Ontario, Lake Agassiz spilled into the Lake Superior Basin, dropping the water plane to very low levels. This low-water phase, or Phase II, lasted for about 1000 years, from 8900 BC until the start of Phase III, about 7900 BC, when a glacial advance in the east blocked the Lake Superior outlet. Lake Agassiz suddenly rose to the "Campbell" level. The most prominent beach ridge complex of Lake Agassiz, the "Campbell", was formed at this time. At an altitude of 415 metres a.s.l., it is visible near Morden as a scarp with a large beach ridge (the "Upper Campbell") at its base, and another beach ridge (the "Lower Campbell") some 13.5 metres lower. About 7500 BC, the ice margin in Ontario again retreated, once more reopening the eastern outlet.

During the next thousand years, eight rather poorly-defined strandlines -- McCauleyville, Blanchard, Hillsboro, Emerado, Ojata, Gladstone, Burnside and Ossawa -- were formed by Lake Agassiz. As the lake drained completely, other strandlines were produced, but these occur north of the MSTW District and are not applicable to this study.

Attempts to date the duration of Lake Agassiz by the carbon-14 method have yielded a time span of about 4000 years. The C-14 method involves a measurement of the radioactive carbon-14 isotope that is absorbed from the atmosphere by all living things. When death occurs, the carbon-14 begins to deteriorate at a constant rate called a "half-life". By measuring the C-14 left in a sample, a physicist can calculate the time that has elapsed since the object was alive. Dating the Agassiz beaches relies on samples of wood or organic sediment that is buried in or adjacent to the ridges. Since there is some possible contamination of these samples, the above chronology should be seen as a "floating" one that may be revised at a future date. However, by about 6800 years BC, the Stanley and Thompson Rural Municipalities were entirely free of ice and water, and available for human habitation.

**Climate, Flora and Fauna**

The conditions that existed in central Canada from the period of deglaciation to the time when historical records were being kept must be inferred, mainly from the study of fossil plant material. There are two types of evidence used by palaeobotanists -- "macrofossils", such as bark, seeds or cones that are found in peat bogs and similar deposits, and pollen, recovered from sediments of pond and lake




*This diagram depicts the history of Lake Agassiz from its beginnings around 9500 BC to its final disappearance some 3000 years later. The names to the left and right and the adjacent "steps" refer to the strandlines that represent the various levels of the lake. Around 9000 BC, the lake fell to low levels and so remained for about 1000 years before it rose to the Campbell level to form the most prominent of the Agassiz strandlines in Manitoba.*

bottoms. Changes in the types of pollen and macrofossils found at a particular site indicate changes in the prevailing climate. In turn, people and animals, as part of the environment, adapt to changes in climate and vegetation.

With glacial expansion out of the north around 24,000 BC, the climate of central Canada was much colder and more moist than it is today. The causes of these conditions are not fully understood, although research has shown a relationship between the summer position of the Arctic airmass and the northern extent of the tree line. It is logical to assume that, during periods of glaciation, the climate was dominated by Arctic airmasses rather than warmer Pacific airmasses which prevail over Manitoba in the summer months today.

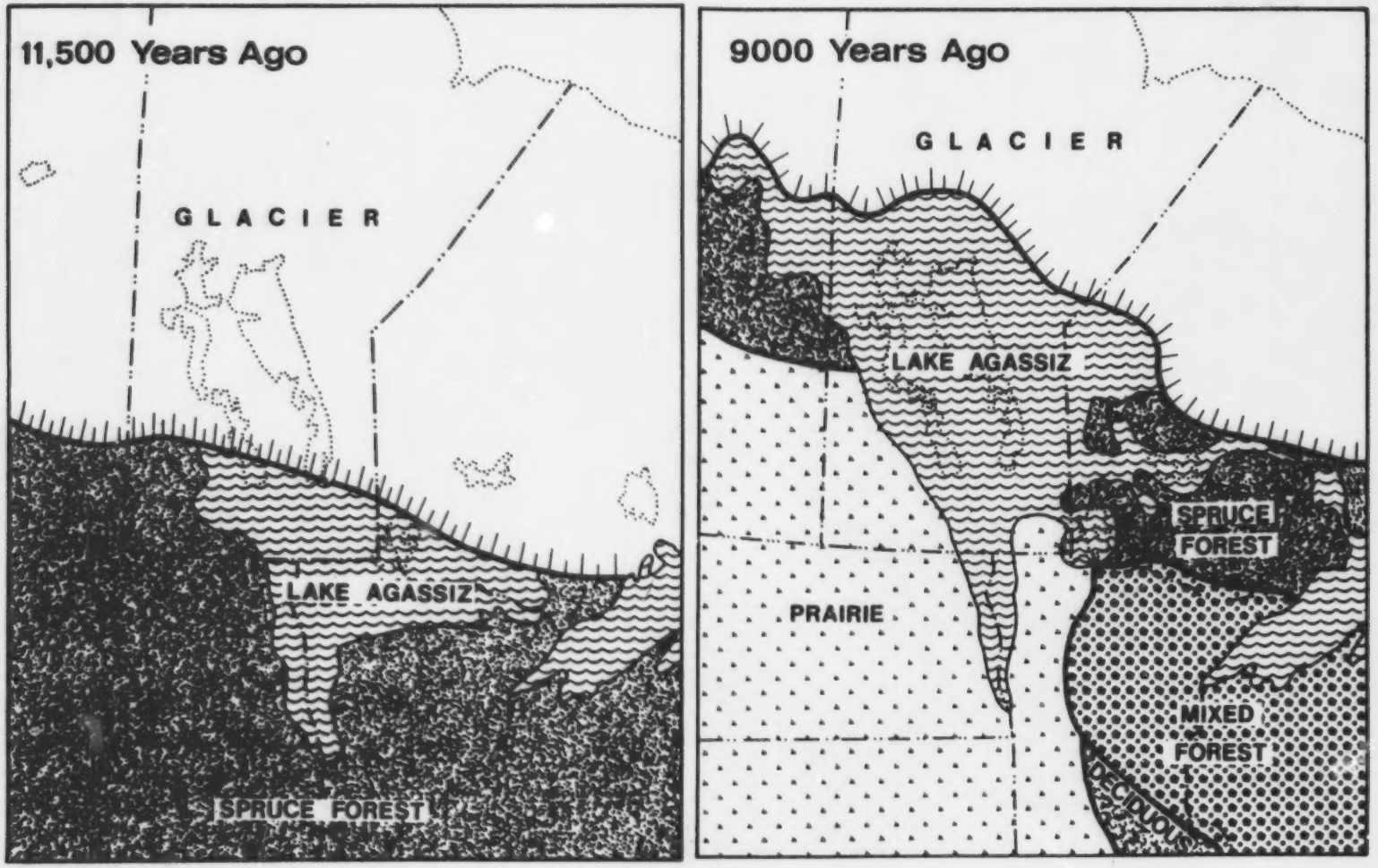
The retreat of the Wisconsinan glacier, which began about 13,000 BC, was likely initiated by a warming trend connected to a shift of the prevailing airmasses from the Arctic to those of the warmer Pacific. Some palaeoclimatologists call this the "Anathermal" climatic phase. While this represented a warming trend, the maximum air temperature was still about 2°C colder than the maximum air temperature of today.

As the ice receded northward, vegetation grew quickly on the newly exposed ground. Studies of current glaciers have shown that spruce can grow on glacial debris within fifty years of its deposition. The major component of the post-glacial forest was spruce, although deciduous species of ash, poplar and birch were also present. Herbs included sage, pigweed, ragweed, and a variety of grasses. Shrubs were represented by hazel, soapberry, willow and juniper. Unlike the present Boreal Forest in Manitoba, this early forest contained no pine. There is no plant community existing today that replicates the early post-glacial forest.

Man apparently entered post-glacial Manitoba between 10,000 and 8000 BC, based on scanty and sparsely distributed finds of early forms of stone tools. Very little information has yet been recovered as to the kinds of animals that were hunted in Manitoba at that time, as will be discussed below.

During the period from 8000 to 4400 BC, the warming trend continued, culminating in what climatologists refer to as the "Altithermal" (high heat) phase. The climate was much warmer and drier, and the vegetation changed accordingly. About 8000 BC, prairies developed in western Manitoba, with occasional groves of deciduous trees, and the forest shifted northward. Pigweed, ragweed, sage, moss pink, alder, buffaloberry, scarlet mallow, snowberry, willow and grass pollen have been recovered in Southern Manitoba from this time period. Lake Agassiz still covered much of the eastern half of the province.

As the last of Lake Agassiz drained into Hudson Bay around




*The diagrams on this and the following page depict three things -- the retreat of the last ice sheet, the development of Lake Agassiz, and the evolution of Manitoba's vegetation zones between 9500 and 1000 B.C. It can truly be said that Manitoba 's natural history witnessed some dramatic changes over the past 12,000 years.*

FOREST TUNDRA
SPRUCE FOREST
MIXED FOREST
DECIDUOUS
PARKLAND & PRAIRIE
6000 Years Ago
0 100 200Mi.
0 100 200 300 Km.

FOREST TUNDRA
SPRUCE FOREST
MIXED FOREST
DECIDUOUS
PARKLAND & PRAIRIE
3000 Years Ago
0 100 200Mi.
0 100 200 300 Km.

5500 BC, the warming and drying trend continued, so that by 4500 BC the adjacent forest had expanded northward 240 kilometres past the present tree line. Meanwhile, in Southern Manitoba, deciduous trees moved up from the south marking the initial occurrence of Aspen Parklands. As well, deciduous forests were found along streams and in river valleys. The extinction of the long-horned Bison occidentalis, perhaps as recently as 4200 BC, marks the emergence of an essentially modern character of Southern Manitoba mammalian fauna.

A final major climatic shift occurred about 500 BC when temperatures cooled and moisture increased. This phase is termed the "Medithermal". The Aspen Parkland became firmly established, and increased moisture initiated the formation of bogs and swamps in low-lying areas. The mixed deciduous-coniferous forest moved into the Riding Mountain area, while in the far north the tree line shifted to a position some 65 kilometres south of its present location.

Manitoba's modern vegetation zones did not change much within the past 2500 years until Euro-Canadian settlement and agriculture arrived in full force to drastically alter the landscape. Few examples of true prairie can now be found untouched by the plow, and Aspen Parkland only remains as isolated clumps of aspen, birch, balsam poplar and white spruce around marshes and lakes or lining the banks and valleys of streams.

Changes in environmental conditions mean that human lifeways, as part of the environment, also changed. The adaptation of the people to the environment is represented in their cultural remains. Unfortunately, little has been found preserved in the soils of the area other than a portion of the stone tool industries of the prehistoric peoples.

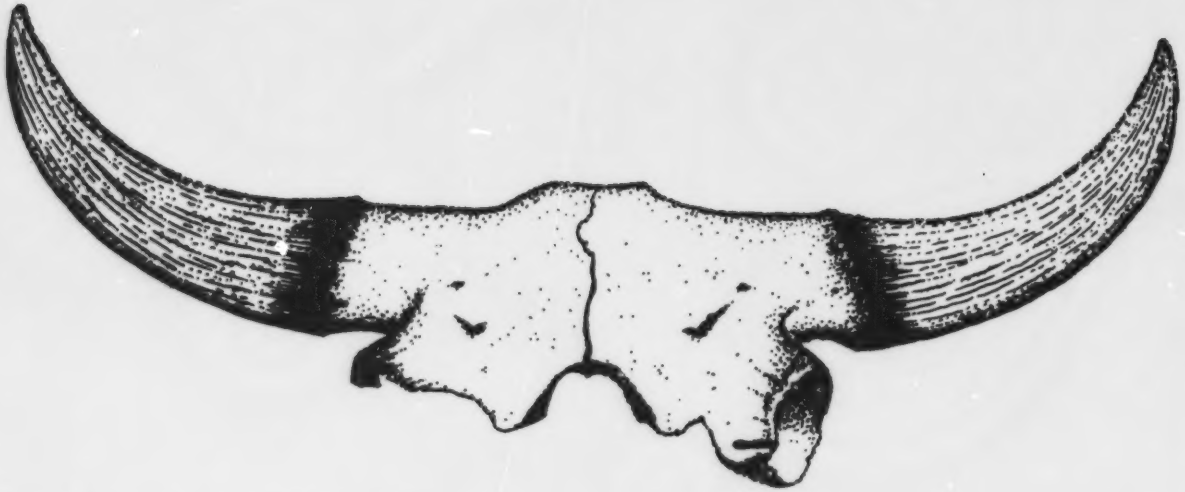
## CULTURAL HISTORY

### Early Prehistoric Period

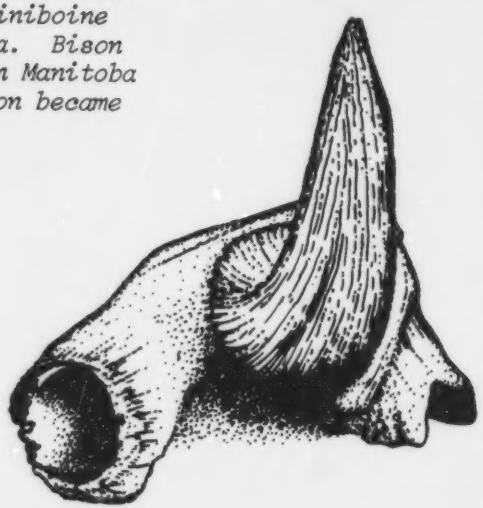
This book deals with a small area of south-central Manitoba and the people who lived here in the past. However, before we can begin to reflect on man's first penetration into the MSTW District, we must go back to his entry into North America. With the estimated date of his appearance into North America being pushed further back in time as more evidence is uncovered, this is one of the most intriguing areas of study for archaeologists.

It is generally accepted that the human race had evolved into its modern form, Homo sapiens sapiens, in the Old World before the New World was populated, since all human fossils found in the New World are of the modern type. These biological developments had taken place in the Eastern Hemisphere by 50,000 years ago.

During the Pleistocene glaciations, huge amounts of the earth's water were locked up on



*The partial skull of an extinct bison found in the bank of the Assiniboine River near Millbank, Manitoba. Bison became common in southwestern Manitoba around 8000 BC when the region became an extensive grassland.*



land in the form of ice. This exposed narrow corridors and shelves around the continents of Asia and North America, including the land now under the Bering Strait. The resulting land bridge, some 1000 miles wide, connected the two continents, allowing the migration of animals and people from the Old World to the New. The land bridge, called "Beringia", was open many times before and during the Pleistocene, so that animals that had evolved on either continent could cross over to the other. For example, the horse, wolf and camel migrated westward from America, while the elephant, bison, muskox and deer of Asia migrated eastward into the New World from the Old. As the continental glaciers melted, the sea level rose and Beringia narrowed and finally disappeared, reappearing again as the ice built up once more. Thus, when Beringia was exposed, much of North America was ice-covered.

In the past 40,000 years, Beringia was probably above water only twice -- between about 34,000 and 30,000 years BC, and again between 26,000 and 11,000 BC. Not to be thought of as a headlong rush, the crossing of Beringia by human groups may have involved up to 50 generations of tracking and hunting the migrating herds of big game.

The next step of the journey was the movement south into the rest of North America. Again, we turn to geology and the extent of the continental glacier to find a route. One possible avenue, along the west coast of North America, was blocked by ice and rugged terrain. The most likely route south was over the ice-free areas north of the Brooks Range in Alaska, or up the Yukon River Valley, into the MacKenzie River Valley and then south along the eastern slopes of the Rocky Mountains into the Continental United States. This route is the dividing line between the large "Cordilleran" glacier that covered the Rockies and West Coast and the "Laurentide" glacier that buried Manitoba and the central part of the Continent, spreading out from the Hudson Bay area. There is some discussion in the literature about when this ice-free corridor was open. One theory is that this corridor was blocked by ice for 7000 years between 18,000 and 11,000 years BC. During this time, the ice was at its thickest, meaning that it was still possible to cross Beringia into Alaska, but southerly penetration was prevented until the ice sheets receded.

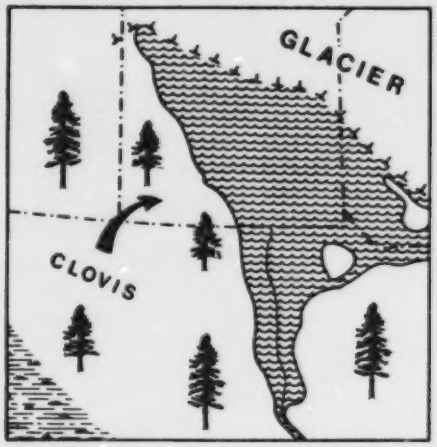
There is growing evidence that people had made the trip south before the corridor was closed by ice 20,000 years ago. A human skull, called "Los Angeles Man", has been dated at 21,600 years BC, and early stone tools have been found in the United States. As yet, little can be said about how these ancient people lived.

The earliest substantial evidence of human beings in the New World is that of the "Palaeo-Indians", dated to about 9500 BC in the plains of western Texas, Arizona, and New Mexico. The earliest of these are referred

to by archaeologists as "Clovis".

The food resources of the Clovis people were primarily ice-age mammals such as the mammoth and, to a lesser degree, bison. In order to penetrate the thick hides of these animals the Clovis people developed distinctive, finely made stone spear tips. These "Clovis points" are 10 to 13 centimetres long with nearly parallel sides close to the base. They are carefully thinned and symmetrical for better penetration. The sharp edges near the base are intentionally dulled, probably so that the lashings used to attach the point to the shaft would not be cut. The base is slightly to markedly concave with large thinning flakes removed from the base on both faces. This technique, called "fluting", was another method used to attach the point firmly into the spear shaft. Modern flintknappers have found that considerable practice is required to reach the level of craftsmanship necessary to make a Clovis point.

Associated with Clovis points are items such as stone knives and choppers to skin and butcher animals, and stone scraping tools to prepare hides and shape spear shafts. The Clovis people spread throughout the available lands from coast to coast, including areas of Southern Manitoba west of the Escarpment. Evidence of the Clovis Culture is extremely rare in Manitoba, however, with less than half a dozen isolated surface finds of Clovis points having been recorded thus far. Furthermore, the distribution is restricted;




*When Clovis people first ventured into Manitoba (arrow), most of the province was uninhabitable because it was either buried under ice or flooded by Lake Agassiz. Even those areas that were ice- and lake-free may not have been particularly attractive, since they were covered by a spruce-dominated boreal-type forest that probably did not support the numbers and variety of big game upon which Clovis people based their livelihood. Nonetheless, Clovis points do come to light from time to time, and one of those presently on record was found just to the west of the MSTW Planning District.*

*A reworked Clovis point found near Manitou just to the west of the MSTW Planning District. The white spots are depressions created by the removal of pieces when the artifact was exposed to considerable heat, either from a natural fire or from a hearth into which it was discarded. Actual specimen is 5.8 cm long.*

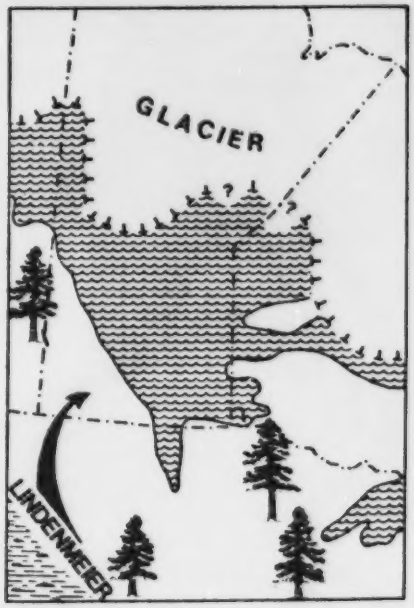
they were all found west of the Manitoba Escarpment, between Swan River and the American Border. However, this scarcity is understandable when we look at the natural conditions that existed in Manitoba during Clovis times. For one thing, the entire northern half of the province was covered by an active glacier, and one can hardly expect human beings to be making a living on top of a barren ice sheet! In addition, Lake Agassiz covered all of the area south of the ice and east of the Manitoba Escarpment. This leaves a relatively small segment of the province open and accessible to the Clovis people. And even here, conditions were not the best, for the "dry" landscape was covered with a spruce forest that must have proven relatively unattractive to the large grass-eating animals that Clovis people hunted for food. Compared to what the lush grasslands of the Central and Southern Plains had to offer big game animals, with their need for abundant food, Manitoba must have had relatively little to recommend it. All things considered, it comes as no surprise, therefore, that traces of Clovis culture are scarce in our area.

The next cultural development on the North American Plains is called "Lindenmeier", dating between 9000 and 8000 BC. The lifeways of the Lindenmeier people were somewhat different than those of their Clovis predecessors. Archaeological evidence demonstrates that the chief prey of the Lindenmeier people was the long-horned bison that were killed

in a new hunting method called the "surround" technique. Several kill sites, found elsewhere on the Plains, indicate that groups of bison were surrounded or trapped in blind gullies and slaughtered. The bison could also be trapped in deep snow and killed. This method produced a large supply of food at one time and required more hunters in a co-ordinated effort than was required to take the mammoth.

The Lindenmeier hunters developed a smaller, more refined spear point and possessed a projector called the "atlatl". The atlatl increased the power with which a spear was thrown, acting as an extension of the hunter's arm. The distinctive "Folsom" point was technically more refined than the typically larger Clovis point, with the fluting technique improved to make the points very thin. Other items in the Lindenmeier tool kit were similar to those of Clovis, with stone scrapers, choppers and knives being present.

Evidence of Lindenmeier people in Manitoba is slightly more abundant than that of Clovis, but still consists mainly of isolated surface finds west of the Manitoba Escarpment. The Lindenmeier people of Manitoba were probably here in small numbers, rather than in larger groups as represented in Texas, Colorado, and other states, since their prey was not well adapted to the spruce forest present in Southern Manitoba at that time. No Clovis or Folsom points have yet been reported from the MSTW District.



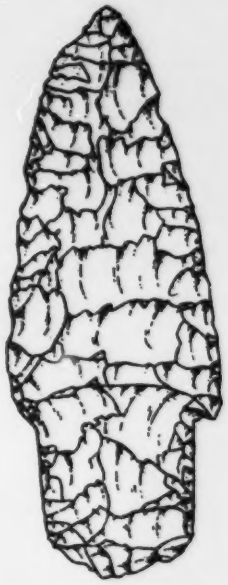

*The Lindenmeier occupation of Manitoba took place at a time (9000-8000 BC) when most of the province was covered by ice and glacial meltwater. The "high and dry" areas, including portions of the Thompson and Stanley municipalities, were still covered with a spruce-dominated forest, which failed to attract sizeable numbers of bison -- Lindenmeier Man's favoured prey. As a result, the corresponding archaeological evidence is very scarce in this province, and none at all has been recorded in the MSTW Planning District.*

*The basal portion of a Folsom point found near Treherne, just to the northwest of the MSTW Planning District. The original point was probably broken during a hunt. The spear shaft, with this fragment still attached, was brought back to camp, where the remnant piece was discarded and replaced by a new point. Natural size.*

*The leather industry extends back into Early Prehistoric time in Southern Manitoba.*

The Lindenmeier Culture was in turn replaced by those called "Plano". The Plano people moved onto the Great Plains of Canada and the United States about 8500 BC. These Plano groups manufactured two basic classes of projectile points -- (1) leaf-shaped "lanceolate" varieties and (2) stemmed varieties. The leaf-shaped points are commonly called "Agate Basin", "Plainview", "Angostura", and "Hell Gap", distinguished by shape and size. These points have been found on both sides of the western Campbell Beach, whereas the stemmed varieties, called "Alberta", "Scottsbluff", and "Eden" are found only to the west of the Beach. The best explanation for the distribution of the Plano points is that the stemmed point-makers were present while Lake Agassiz stood at the Campbell level, while the lanceolate point makers were in Manitoba after the lake basin began to drain. The problem is relevant to the MSTW District since the Campbell Beach cuts diagonally through both Stanley and Thompson Municipalities.

The comparatively large number of Plano point finds in Manitoba (well over 200) indicates that there was a marked increase in population and that the Plano people occupied the area for an extended period of time. That the MSTW District shared in this development is indicated by the presence of Agate Basin and, to a lesser degree, Plainview projectile points in local collections.



*An Alberta point from the Boissevain Plain west of the MSTW Planning District. Natural size.*

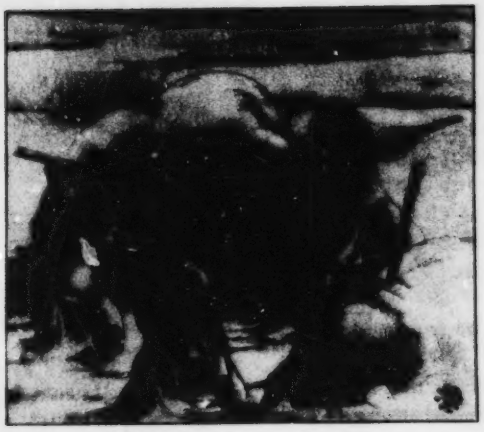
*Agate Basin (left; slightly larger than natural size) and Plainview (natural size) points from the Rosebank and Miami areas, respectively.*

The Plano people appear to have been the first to adapt to the local environment on a long-term basis. This environment was in the process of changing from the cool, moist spruce forest of the Anathermal Period to the dry grasslands of the warming phase that led to the Altithermal. The Grasslands that were the feeding grounds for the bison gradually expanded into Southern Manitoba from the south and west where the Plano cultures seem to have developed.

By Plano times, the surround hunting technique had been supplemented by what is called the "jump" method of bison hunting. This was simple in its conception, but the success of the jump depended upon the cooperation, advance planning and organization of a sizeable group of people. The basic idea was to direct a herd of bison toward a precipice and drive it over the edge. The key to the hunt was the knowledge that a herd of bison would usually stampede in a blind rush away from danger. Preparation for the hunt involved forming two long lines of men, women and children, or perhaps clumps of bush with people hiding behind them. These lines were in a "V-shape" with a narrow opening at the edge of a cliff or gully. The crucial beginning of a jump kill involved turning a herd of a few hundred bison into the wide end of the V-shaped trap, with a number of men behind the bison to prevent their escape. When the herd had entered the trap a signal was given by the leader of the hunt, and the others would begin to shout and wave hides

*When people first arrived in the MSTW area they were prevented from travelling further eastward by a great freshwater lake -- Glacial Lake Agassiz -- which covered what is now much of Southern Manitoba. Formed by the meltwater from the receding continental glacier, it was a barrier to further settlement until late Palaeo-Indian times. The lowering of the lake allowed for the settlement of the lowlands of the Gladstone and Portage plains. Today's Lakes Winnipeg and Manitoba are but remnants of this once-great inland sea.*

*Man's pursuit of food during the Palaeo-Indian period was land-based and bison was his main prey. No doubt, while standing on the Campbell beach ridge, he wondered who and what might be found on the other, invisible shore of the lake. His distant cousins on that far shore likely thought the same thing.*



*The mud at the edge of a slough or wallow could prove to be a death trap for the bison. Stampeded into the soft ground, these animals could be mired down and become easy prey to hunters armed with darts or spears. Although trapped, the huge animal would still attempt to fight back and escape. It is likely that many hunters were gored, trampled or killed during such encounters with their prey. The hunter would take what was desired or needed from the kill and leave what was not immediately necessary. Prior to the extermination of the bison in the mid-and late 1800s, and possibly during the severest droughts of the "Altithermal" (see below), there would always be another bison available to fulfill his wants and needs.*

*A solitary Palaeo-Indian hunter, at the climax of his hunt, prepares to release a stone-tipped dart from his atlatl or spear thrower. Here, all the skills learned from his elders and his practice over many seasons come together for a moment in time and space.*

*The bison will provide the hunter, his band and his family with food, hides for protection, tools from bones and horn, a container for food from the paunch, and sinews for tying points to dart shafts.*

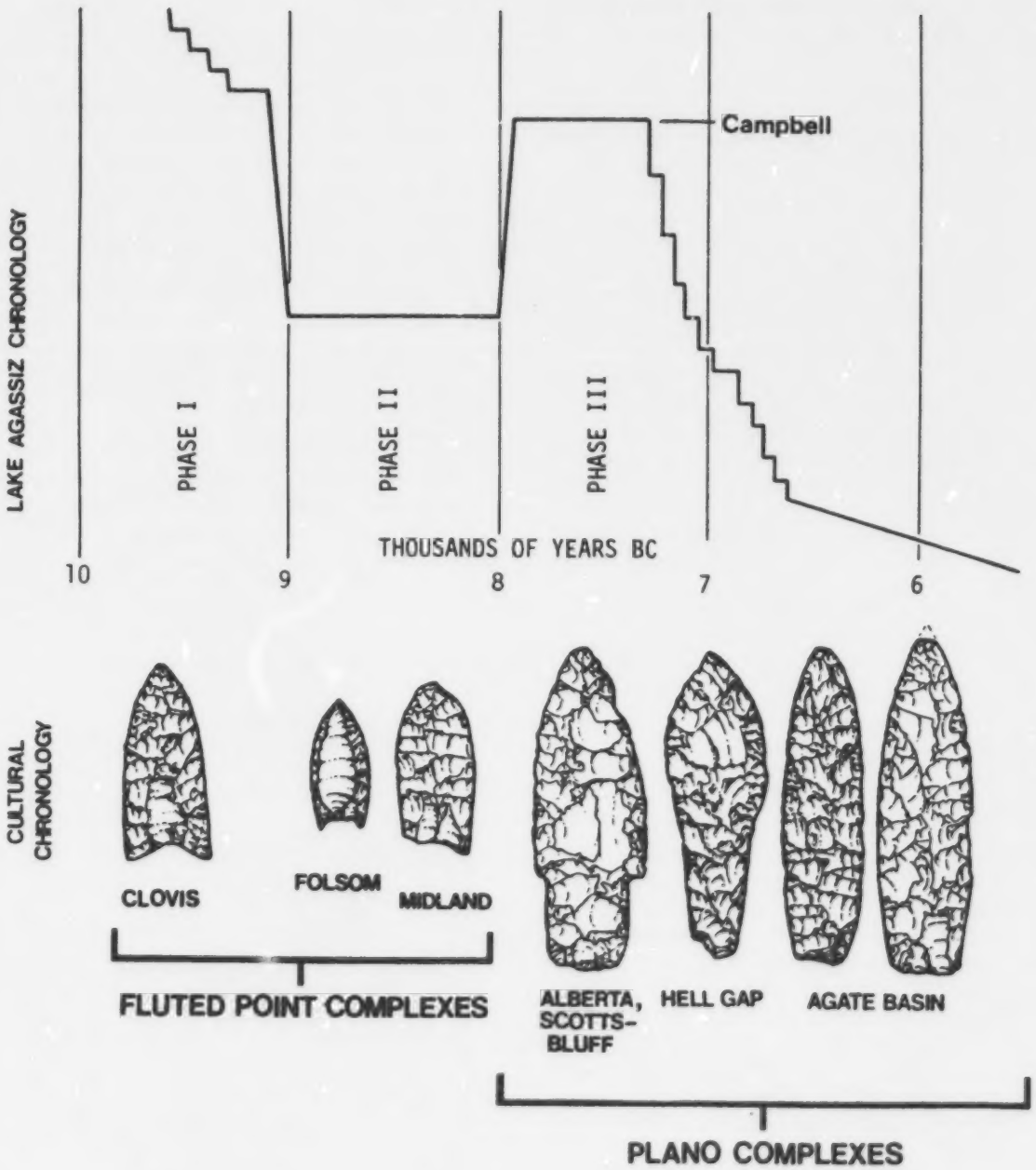
*Today the point, some of the bones from the kill, and perhaps a nearby campfire used to cook some of the meat, can provide useful information to the archaeologist about how and when this event occurred. While we will never know all that happened during those ancient times, such clues can add much to our knowledge of the distant past.*

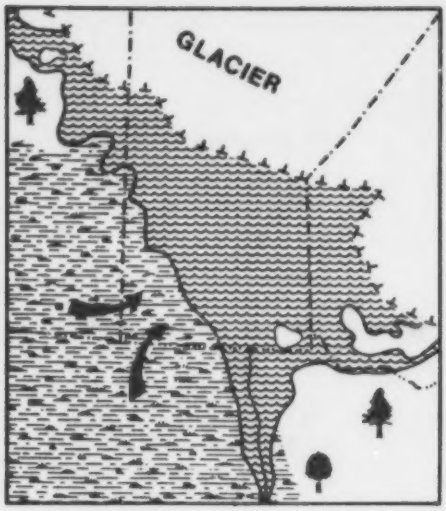
to frighten the bison further into the trap, between the narrowing lines. The terrified herd would rush towards the apparent escape opening and plunge to their deaths over the precipice. The efficient organization and cooperation of the hunters culminated with the systematic butchering of the animals and the distribution of the meat.

The presence of the bison in large numbers, combined with the highly productive jump hunting technique, gave the Plano peoples a relatively secure base from which an increasingly complex social organization developed. Certain individuals would emerge as leaders in the group, with ritual activities related to the hunt likely developing during this period, and family ties may have been important for the distribution of food. Unfortunately, these ideas are mostly conjectural since the only solid evidence left in the archaeological record is stones and bones. As far as clothing, housing, and details of social life are concerned, we are no wiser than we were in the case of the Clovis or Lindenmeier peoples.

Between about 10,000 and 8000 BC, more than a hundred species of mammals became extinct in North America. This time period saw the rise of Clovis, Lindenmeier, and Plano cultures, and the occurrence of major climatic changes. Towards the later years of the Plano period, the climatic conditions of the warm, dry Altithermal phase influenced significant changes in the

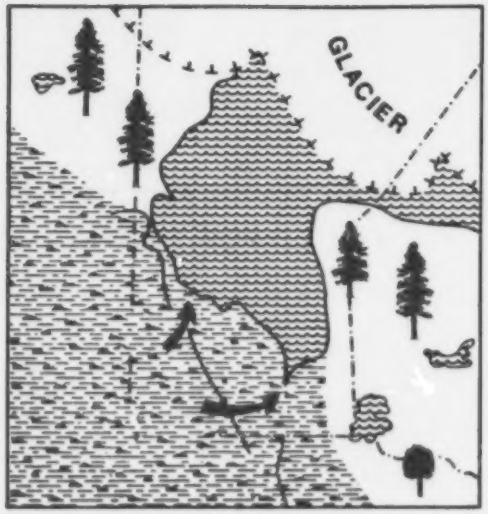
*This diagram correlates the history of Lake Agassiz with the Palaeo-Indian culture history of Southern Manitoba. Phase I of the lake, characterized by high levels, coincides with the Clovis Culture. Throughout this period of time, the land east of the Manitoba Escarpment was inundated and no Clovis sites are expected to be found in the Red River Plain for that reason. With the advent of the Lindenmeier Period (9000-8000 BC), Lake Agassiz fell, and it is theoretically possible that evidence of this culture exists east of the Escarpment. With the return of the lake to high levels around 8000 BC, most of the Red River Plain once again became inaccessible to human beings. This situation existed for some 700 years, during which time the Campbell strandline was formed. In light of the fact that no Alberta, Scottsbluff or Eden points have ever been found at elevations below that of the Campbell strandline, it is assumed that the people who made and used them lived in Manitoba while the lake stood at the Campbell level. It would also appear that these early Plano people left the region before the lake began its fall around 7300 BC. By that time, the makers of Agate Basin and Hell Gap points occupied southwestern Manitoba, and it was they who moved down onto the Red River Plain as Lake Agassiz gradually diminished and finally disappeared. This scenario is supported by the evidence discovered to date in the MSTW Planning District.*


LAKE AGASSIZ CHRONOLOGY
PHASE I
PHASE II
PHASE III
Campbell
THOUSANDS OF YEARS BC
10
9
8
7
6
CULTURAL CHRONOLOGY
CLOVIS
FOLSOM
MIDLAND
FLUTED POINT COMPLEXES
ALBERTA, SCOTTS-BLUFF
HELL GAP
AGATE BASIN
PLANO COMPLEXES




*With the changeover from boreal-type forest to Grassland ca. 8000 BC, the countryside west of Lake Agassiz was occupied by human beings originating to the south and west. They were the makers of Plano points, who no doubt found southwestern Manitoba, including the Stanley-Thompson area, very much to their liking.*

*When Lake Agassiz commenced its final decline around 7500 BC, more and more living space became available in Southern Manitoba. Those who took advantage of the opportunity to occupy it were makers of lanceolate points, whose artifacts are fairly common within the lowlands.*



lifestyle of the people. While still dependant on game, they seem to have used increasing numbers of wild plants for food. This is evidenced by finds of grinding stones and slabs at Plano sites from New Mexico to Missouri. Reasons proposed for this increasing reliance on plant foods include a shortage of game after the wave of extinction, and the limiting of hunting grounds available to hunting bands due to an increase in human population. Each group would need to exploit the plant and animal resources of their region more intensively. This led to a gradual change from a big game hunting emphasis throughout most of North America to a more diversified hunting-and-gathering economy that marks the advent of the next period of prehistory.

**Middle Prehistoric Period**

The general view of North American cultures during the Middle Prehistoric Period (5000 BC to AD 1), is one of population growth and regional adaptation to different environments. These adaptations are expressed in the tool kits left in the archaeological record.

For the people along the East Coast of the continent, fish became an important food resource. Fish were hooked, netted, and trapped in ingenious weirs made of wooden posts, sharpened with stone axes and stuck into stream beds and the mud of tidal flats. This innovation provided the people with an abundant food resource so that they could establish long-term habitation sites nearby.

People in the forests, between the Plains and the East Coast, hunted deer, turkey, wildcat and oppossum, as well as a variety of freshwater fish and mussels. They gathered hickory nuts, acorns, and walnuts. Evidence of dwellings shows that these people would live in one place for considerable periods, developing specialized woodworking tools, notably ground stone axes and adzes. Their "tool kit" included grinding stones to process nuts and berries, chipped stone drills for making clothes, chipped stone knives, fishhooks, and, of course, projectile points suited to their prey and the environment.

Indians around the west end of Lake Superior made use of nuggets of almost pure copper to make tools and ornaments. In fact, they mined copper on Isle Royal and were among the first people in the world to use metal.

The Great Lakes region was the likely birthplace of an important invention, the birch bark canoe. This lightweight craft gave those people access to thousands of lakes connected by streams and rivers. They were nomadic folk who hunted, gathered, and fished for food.

The Desert area of the American Southwest saw the rise of the Desert Archaic Culture. Those hunters and gatherers were equipped with woven baskets and stone grinding tools to exploit the area's most reliable food --

grass and shrub seeds. Since the game was never abundant and often small in body size, their diet consisted of anything that could be killed including deer, sheep, coyotes, antelope, rabbit, prairie dog, and badgers.

The richest area of the continent was the West Coast from Alaska to California. Here the people had ample sustenance literally on their doorstep. Food was everywhere -- sheep, goat, bear, moose, and deer in the forests; sturgeon, halibut, seal, sea lion, whale and porpoise in the sea; and tons of salmon in the rivers. The rich, reliable food supply of the Northwest Coast gave the people considerable time for the development of arts, crafts and elaborate rituals.

The above examples are given so that the reader can appreciate the cultural diversity that evolved during the Middle Prehistoric Period. Of course, not all of these achievements affected the people of Southern Manitoba, but occasional finds of copper tools, shell ornaments, or imported stone indicate some trade or contact with these distant cultures.

On the Great Plains, east of the Rocky Mountains, bison continued to be the principal food resource. The large herds of bison were hunted using the methods that were developed during the Early Prehistoric Period. The people followed the bison in their regular seasonal rounds, from the open prairies in the summer to the sheltered valleys and wooded areas of the Aspen Parkland in the winter. They organized "jump" kills whenever feasible and killed small groups of bison in the winter when the bison could be trapped in deep snow.

The earliest cultural evidence from the Middle Prehistoric Period in southwestern Manitoba dates to about 3500 BC. This leaves a gap of about 1500 to 2000 years between the Early and Middle Prehistoric periods. The lack of evidence during this hiatus can be attributed to the drought conditions of the Altithermal that reduced vegetation on the prairies, forcing people and animals to the fringes of the Plains where water and vegetation were more reliable.

Theoretically, the MSTW District represents one of these "fringe" areas where sheltered valleys and year round springs can be found. The potential use of this area increases the importance of archaeological research in the MSTW District. It has been suggested that the people of this time period used large side-notched projectile points to kill game. Unfortunately, these points are similar to later styles and are not easily identified in surface collections.

There are three major problems to be addressed to better understand this period. First, where did the late Plano people go, and did their tools evolve into new types such as the large side-notched point? Secondly, were the Plains and fringe areas completely abandoned? If so, where did the people go and what

evidence can be found of the residents of this period? Thirdly, what are the origins of the people who moved back onto the Plains in the post-Altithermal period?

After the climax of the Altithermal was reached about 4500 BC, there was a gradual cooling with increasing moisture. By 3500 BC, the severe drought conditions were gone and vegetation zones developed their modern character, although not their historical locations. About this time, man followed the game back onto the grasslands and the population started to increase, a trend that continued for the rest of the Middle Prehistoric.

Centuries passed. Changes occurred in the styles of projectile points and other tools in the material culture of the peoples. Stylistic changes in projectile points affected size, shape, the way points were made to fit into spear shafts, and the raw materials used to make the points. Bands of people would pass through the MSTW District carrying with them the type of point developed by their culture, as well as non-material ideas about religion, their language and kinship ties. These groups were represenatives of the "Oxbow", "McKean" and "Pelican Lake" cultures found throughout the Canadian Plains.

Archaeologists have established a cultural sequence for the Middle Prehistoric based on dates from excavated sites. As it now stands, the Oxbow and McKean cultures are early in the sequence. The Pelican Lake culture is later. There is a fair amount of overlapping in the dates for each group, so that more than one group could have occupied the same general region at the same time. However, each group would retain its own identity, while possibly adopting ideas that improved their lifestyle.

The Oxbow people likely moved into Southern Manitoba from the west. Dated sites show that the early Oxbow sites are found in the west, becoming more recent as one moves east and north. Oxbow projectile points have been found in the Plains, Aspen Parkland, and Boreal Forest environments of Alberta, Saskatchewan, Manitoba, Minnesota, Montana and Wyoming. The time range for the Oxbow Culture runs from 3300 to 1000 BC, with some elements of the stone tool technology persisting until as late as 900 AD. The Oxbow people were nomadic hunters and gatherers. They hunted bison by the surround and jump methods for their principal food, but also consumed elk, wolf, dog, rabbit, fox, gooseberries, cherries and river clams.

The Oxbow projectile point is side-notched with a concave base and characteristic rounded "ears" between the notches and the base. These points were attached to atlatl darts and were commonly resharpened until very little of the blade was left. Other items of the tool kit include crude choppers, oval-shaped stone knives, perforators, scrapers, drills, pebble hammerstones and

*The scene in the accompanying drawing probably took place many times in the winter environment of Southern Manitoba. A band of hunters would drive a small bison herd into a gully or ravine and the animals would mire themselves in the soft snow. Other hunters, lying in wait for the herd, would hurl darts from their atlatls and spears into the foundering animals and kill them. A small, well organized group with clearly defined hunting roles were able to gain large amounts of food and hides using this co-operative technique. Kills by single hunters quite likely supplemented the provisions of the band.*

*Damaged and reworked Oxbow point from the Rosebank area. Slightly larger than natural size.*

fire-cracked rocks used in cooking by heating them in a fire and placing them in birch bark or leather containers of water in order to boil the food. Bones, antler, and shell were used to make awls, needles, scrapers, and ornaments. Oxbow points were present in several artifact collections from the MSTW District.

The McKean Culture is estimated to have been present between 3000 BC to 1000 BC. It is recognized by any of three atlatl point types called "McKean", "Duncan", and "Hanna". The Duncan and Hanna points are thought to have evolved from the earlier McKean point type and, along with the other elements of the assemblage, form what is called the "McKean Complex". McKean sites have been found in Manitoba, Saskatchewan, Alberta, Montana, Wyoming, Nebraska, Idaho, Utah, and the western part of the Dakotas. The McKean people were comprised of bands of nomadic bison hunters. Several McKean, Duncan and Hanna points were observed in artifact collections from the Miami and Morden areas.

*McKean point (above) and Hanna point (right) from the Rosebank area. Both natural size.*

*Duncan point from Rosebank area. Slightly larger than natural size.*

*Pelican Lake point of Knife River Flint from the Winkler area. Natural size.*

Pelican Lake projectile points are the most numerous of the Middle Period points in artifact collections of the MSTW Planning District. This probably represents a population increase towards the end of the Middle Prehistoric Period. The Pelican Lake people were nomadic bison hunters who occupied the Northern Plains and adjacent environments between 1000 BC and AD 1. They still used the atlatl and continued to "surround" and "jump" bison in communal hunts. The distinctive Pelican Lake points are triangular with side- or corner-notches, leaving pointed barbs above the notches.

*Damaged Pelican Lake point from the Rosebank area. Slightly larger than natural size.*

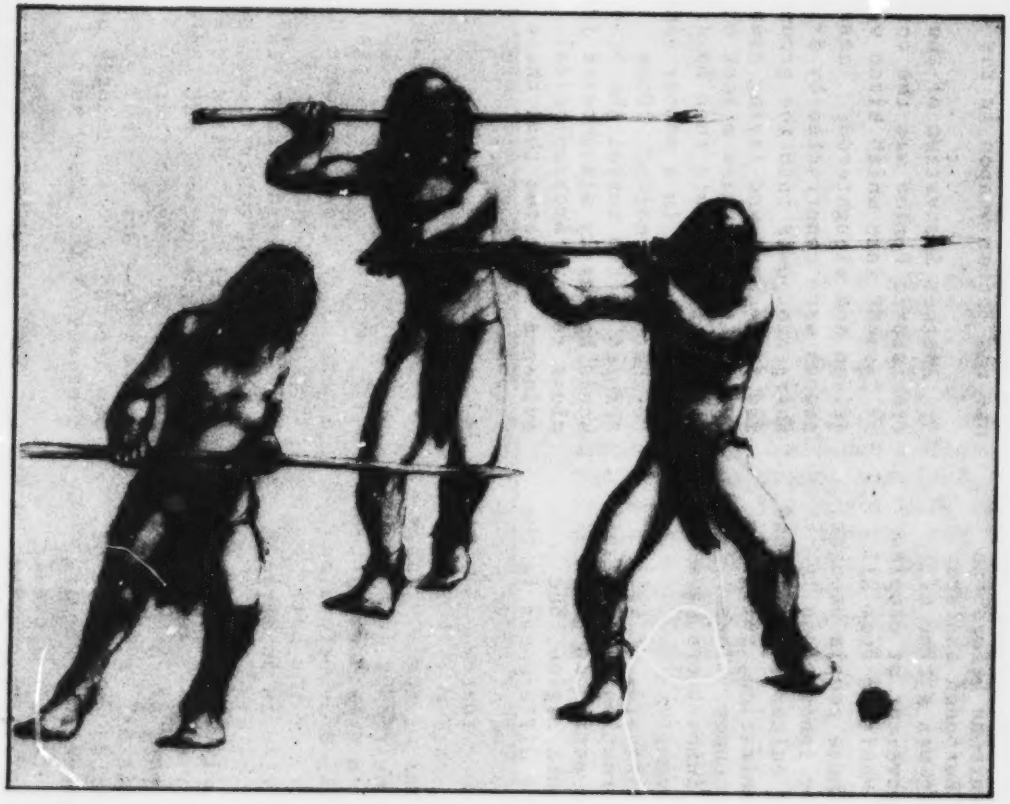
The Pelican Lake people appear to have moved into Southern Manitoba from the south and west. Pelican Lake sites have been found in Plains, Parklands, Foothills, and Boreal Forest environments of Alberta, Saskatchewan, Montana, Nebraska, Wyoming, and Manitoba.

One culture that moved into Manitoba from the east during the Middle Prehistoric Period was the "Old Copper Culture" of the Lake Superior area of Wisconsin and Ontario. Old Copper people fashioned spear points, knives, awls, chisels, adzes, wedges, fishhooks, bracelets and beads from almost pure copper. Only two Old Copper artifacts, both crescent-shaped objects, have been recovered in the MSTW District. Theories as to their use vary from a cutting tool to a religious object based on observations of the moon. The Old Copper Culture represents one of the earliest uses of metal in the world, with dates of between 3000 BC to 1000 BC.

*Left: Old Copper point from Culross, near the MSTW Planning District; below: a crescent from near Morden. Both natural size.*

Generally speaking, all of the groups that inhabited Southern Manitoba during the Middle Prehistoric Period made more use of plant, bird and fish resources than did their Palaeo-Indian predecessors, while continuing the successful hunting of the large herds of bison. The invention or introduction of ceramics and the bow and arrow brings us to the

*Growing up together, learning their roles in the group and developing skills in hunting, young boys -- future hunters and warriors -- formed close bonds within their own age group that would last for life. They competed with each other in the arts of hunting and fighting, and future leaders would have become recognized by demonstrating superior skills. The "joking relationship" most likely formed part of the overall development that youngsters of each age group experienced. In the accompanying scene, one member of a hunting party is being taken to task for some error committed during the chase. In this way, tensions between friends could be released, each knowing that sooner or later his "turn would come".*



*Prior to the advent of the bow and arrow, the principal hunting instruments were the lance (left), the atlatl or dart-thrower (right) and the spear (centre).*

next stage of prehistory, the Late Prehistoric Period.

**Late Prehistoric Period**

The Late Prehistoric Period is the last era of man's occupation of Southern Manitoba before the coming of the European explorer and trader. It was a time of considerable movement of peoples into Southern Manitoba from all directions. These people brought with them major innovations in their material culture, social and political organization, religious customs, and economy. These movements and innovations have resulted in a complex archaeological record. A fair amount of information is available from this time period in the Southern Manitoba region, but there are major differences in the way that archaeologists have interpreted the evidence. Since there are alternate possibilities and explanations of the available information, the reader is cautioned that a great deal more work needs to be done before an adequate picture of the Late Prehistoric Period is achieved.

The people living in the Morden area during this late period formed part of the "Woodland Tradition", a lifeway based on the broad traditions of hunting and gathering. Moving west and north from the forests and woodlands of Minnesota and Ontario, the migrating people brought material culture and skills adapted to a forested environment into the Aspen Parklands of Manitoba. The first Woodland inhabitants of south-central Manitoba were no doubt drawn to the region by the numerous bison available in the Aspen Parkland, especially during the winter. They hunted their prey with the atlatl and the bow and arrow, and were the first to use the latter weapon in the area.

Another innovation of the Late Prehistoric Period was the corral or "pound" into which bison were driven and slaughtered. These pounds were constructed by driving sharpened posts into the ground a few feet apart and laying branches between them to make a sort of fence. Bison would then be driven into the pound in a manner similar to the "jump" method. Once trapped in the corral the bison would be easily slaughtered from close range. Archaeological evidence indicates that these pounds could be easily repaired and re-used.

Since the Woodland people had originated in the forests to the east, an area with fewer bison but a more diversified resource base, they brought with them the knowledge necessary to exploit a wider range of other foods, both plant and animal. Bison were certainly important, but their economy was somewhat more diversified than that of groups who depended overwhelmingly on the proceeds of the bison hunt.

The environment around Morden and much of Southern Manitoba was similar to that of today. The Aspen Parkland dominated the area. During the winter, cold winds and snow made the surrounding open prairie

*To all of us who have experienced a prairie blizzard from the warm vantage of a centrally-heated house, the thought of living in a skin-covered tipi during such a storm is a bleak prospect. However, it is here, nestled in a protected valley, with the wind and snow blowing around their dwellings and ample food and fuel put aside to assure survival, that the true ingenuity of the early MSTW residents is best illustrated. To survive and prosper in a harsh climate such as ours, these people would have to have been intimately aware of the resources and environment around them. Their very lives would have depended on their ability to gain food, clothing and shelter during the harshest winter.*

*The use of the "pound" for trapping and slaughtering bison continued in use in the Grassland and Aspen Parkland of western Canada throughout the Late Prehistoric Period and on into Historic times.*

relatively unattractive for the bison. The herds moved into the Parklands to winter, where wooded bluffs and sheltered valleys offered protection from the prairie winds and cold weather.

It is likely that the Morden area was used year-round in Late Prehistoric times, with the people living and hunting the bison in sheltered areas during the winters. In such locations, the groups would have erected their camps and, thanks to readily available wood for fuel and the abundance of game, they spent the cold months. In the spring, most of them probably followed the migrating bison back out onto the Plains. That some of them remained in the district during the summer, however, is implied by the presence in some sites of pottery, the manufacture and use of which are considered by some archaeologists to be warm-weather activities. The implications are, then, that the people were inhabiting the district in both the winter and the summer.

While this is a simplified account of the way the area was possibly used by man and beast in Late Prehistoric times, it is probably relatively accurate. Other factors, such as mild winters that allowed the bison to remain on the plains, or droughts or major fires, may have altered the migraton of the bison and, consequently, affected the seasonal rounds of the people. However, because their cultural tradition included a familiarity with forest living, they were able to get through periods without bison by obtaining alternative sources of food. Woodland groups included deer, elk, bear, fur-bearers, fish, birds and a variety of edible plants in their diet, in addition to their key resource, the bison.

It would be incorrect to suppose that these peoples thought only of food. While food was obviously vital to their survival, they also had leisure time to contemplate the world around them and come to terms with their lives. Rather than living a solitary, wandering lifestyle, the people of Southern Manitoba were members of a complex community of tribal groups. In our effort to understand the culture history of the Parklands and Plains, we must also consider what was happening in other parts of the continent.

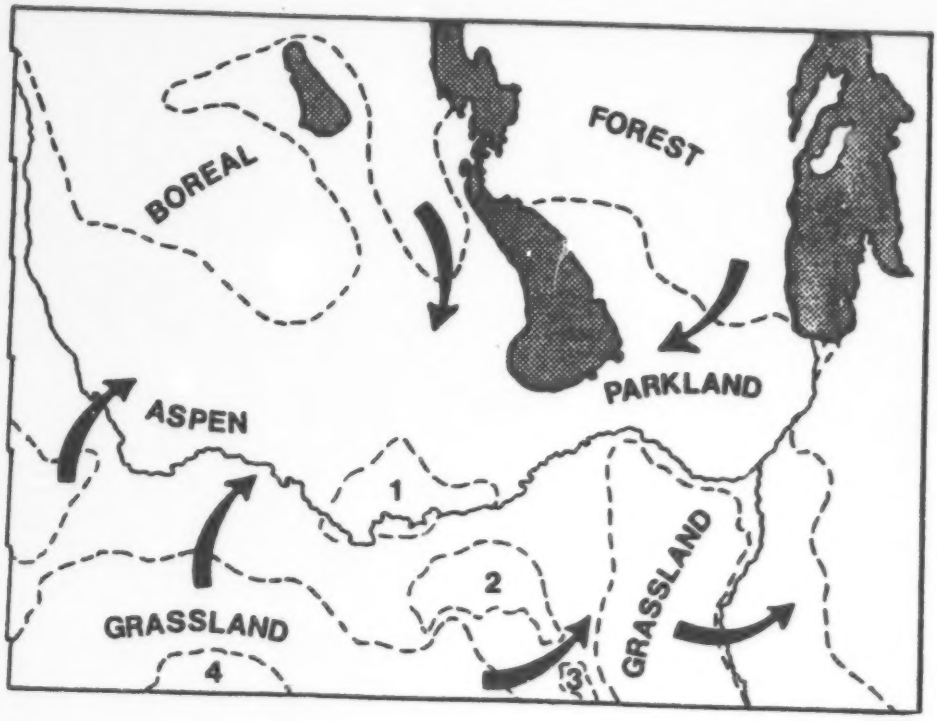
As we shall see, there is some reason to believe that economic ties existed between the Plains, Parkland, and forest peoples of interior North America; and there was undoubtedly considerable contact between them. These contacts led to the borrowing of ideas and trading of material goods. Something that one group had, did, or believed could be adopted by another group and fitted into its way of life.

Many of these borrowed traits were not tangible, that is, they were ideas or concepts adopted by other groups, rather than solid objects. Ideas can, however, generate material goods that eventually became part of the archaeological record. Religious

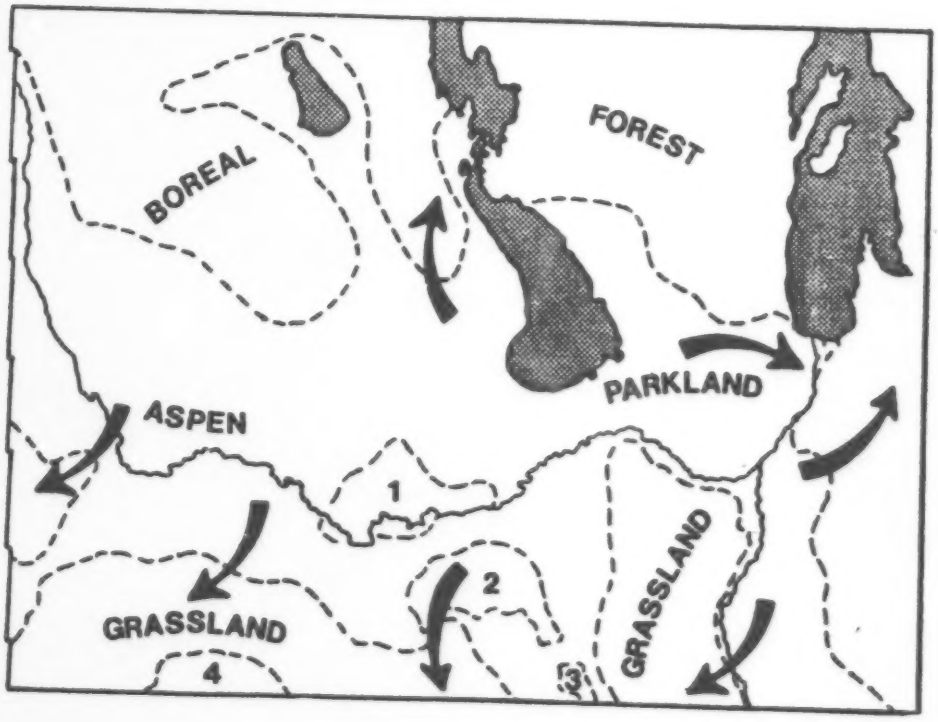
*These maps depict the major portion of Southern Manitoba, showing the principal vegetation zones and their distribution in relation to the MSTW Planning District. The numbered areas are as follows: (1) Boreal (mixed woods) Forest; (2, 3, 4) Boreal (mixed woods) Forest and Aspen Parkland.*

*During the Late Prehistoric Period, summer residents of the Grassland to the south and the Boreal Forest to the north would have converged on the Aspen Parkland in late fall to avail themselves of the bison herds. Inasmuch as the MSTW district was situated well within the Parkland, it can be expected that it was a favoured wintering ground for people from the adjacent areas.*

*With the onset of spring, many of the bison moved back out on the Grassland. Some of the people followed them; others moved to the fisheries along the shores of the lakes to the north, and others no doubt "stayed put" within the Parkland, particularly along the major rivers, to avail themselves of the various local resources as they came into season.*




LATE FALL

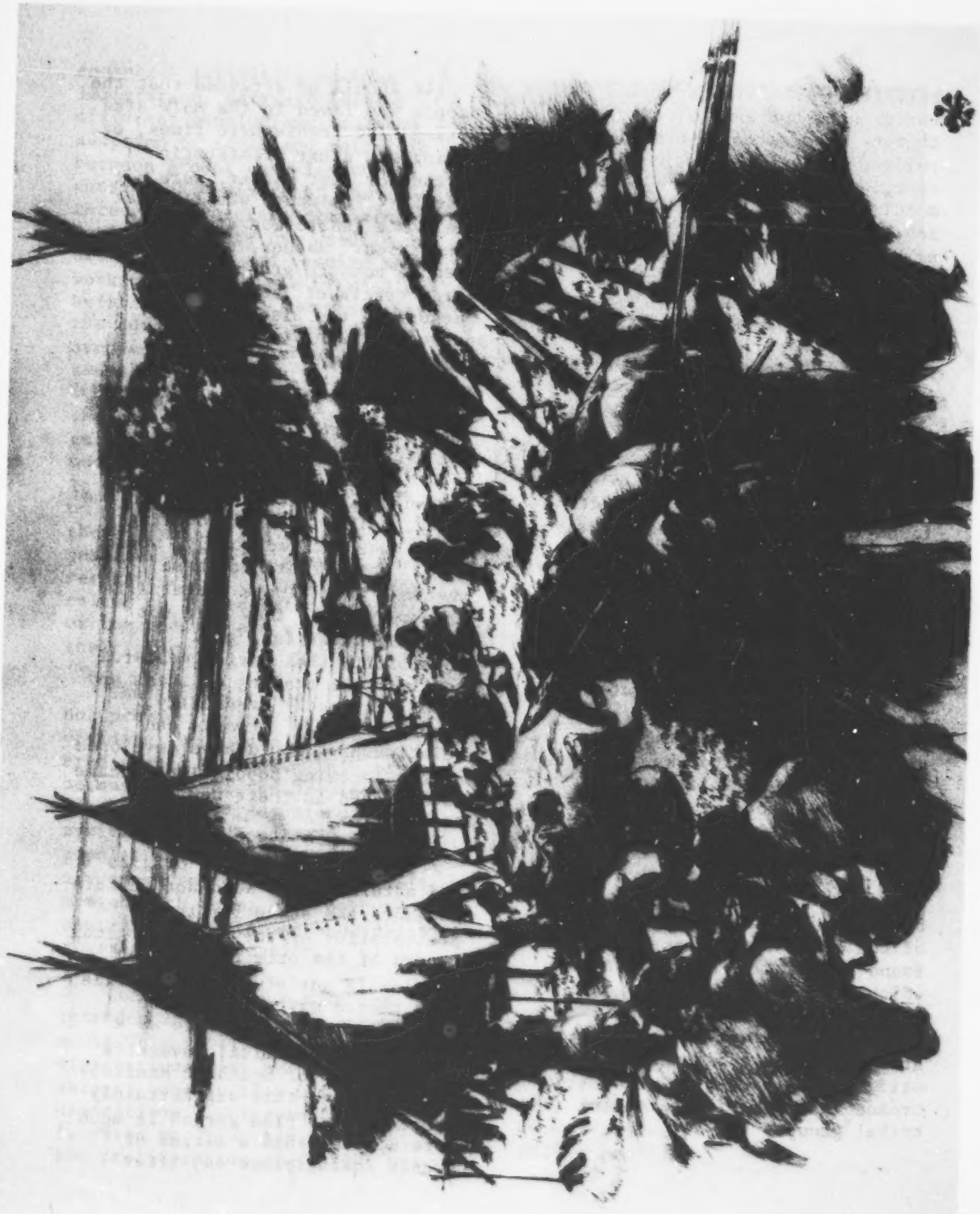



SPRING

*In this scene of day to day life set during the Late Prehistoric Period, a number of activities are taking place. Hides are being prepared for the coming winter. Meat is smoked and dried in the sun. A few clay pots are made for cooking and storage. An experienced flint-knapper is showing the art of making stone tools to a group of young boys. Doubtless, scenes such as this occurred every fall when both man and bison returned to the Parklands from their summer range. At this rich time of the year, nuts, berries and other plant foods would be collected and stored for the bleak months of winter. The wealth of natural resources of the area allowed for leisure times also. Stories of the trip to the south to trade furs for tobacco possibly occupy a few hours for the men passing the pipe.*



*When the camp is abandoned in the spring, the refuse of the hunt -- broken tools, pottery and waste flakes -- will litter the site. When an archaeologist records such an area, many of the activities that took place can be determined by the type of artifacts left by the group. The better the condition of the site, the more potential reconstruction is possible. Often a site area would be used more than once by different people through the ages. Diagnostic tools such as specific types of projectile points or pottery allow the archaeologist to determine whether the site was used by different groups. The more complete the record is, the more information the archaeologist can gather on how, when and why the site was occupied. Thus, it is important that all artifacts found on a site, whether by a collector, land-owner or archaeologist, can be traced back to their place of origin. It is necessary to record details of the site location and catalogue the material from each site separately if we are to obtain an accurate picture of the past residents of the area.*



beliefs as such are not found in the ground, but some of the objects associated with new religious practices could be. For example, burial mounds, alas now mostly destroyed, found across Southern Manitoba by early settlers, indicate such a transfer of ideas into a tangible form. The ideas for mound burials, modified by residents of Manitoba and other areas, originated in the Ohio and Mississippi River Valleys and spread out from there. Burial mounds are found over much of the central and eastern parts of North America.

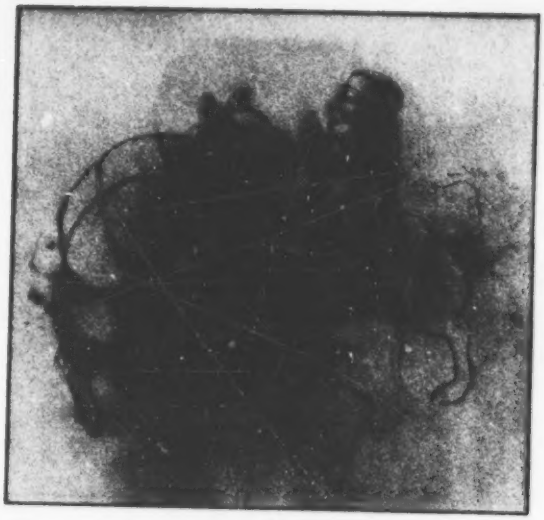
Many of the actual artifacts found in these mounds and at other archaeological sites originated somewhere else, and were brought into Manitoba via complex trade routes. Copper artifacts from Lake Superior and shells from both the Gulf of Mexico and the West Coast have been found at Late Prehistoric sites in Manitoba. Pipestone from Minnesota, volcanic glass (obsidian) from Wyoming, and large amounts of Knife River Flint from North Dakota were also part of these trade networks. One site in particular, Calf Mountain, just west of the Stanley-Pembina Municipality line, seems to have been a focal point for trade. All of the above trade items have been found at the Calf Mountain Site, which lies at a crossroads of major overland trails. While Manitoba was likely a peripheral area for trade and commerce, it still formed part of a much broader network of interacting tribal groups.

It should be stressed that the people who lived in the MSTW area during Late Prehistoric times, or during any other prehistoric period for that matter, were not sedentary residents who lived at one place generation after generation. Rather, they must be seen as nomadic groups who used large tracts of land in their pursuit of the bison, and who passed through areas in their seasonal rounds.

There is little doubt that one band would move into an area that had previously "belonged" to another, and then used it themselves. Likely, more than one group, using different hunting techniques and technology, would meet. Whether or not these meetings were always peaceful is unknown; likely they were not. However, there is a good possibility that during peaceful meetings the trading of ideas and goods occurred. Eventually, regular trading networks and relationships would have developed as the incoming populations became established in their new territories.

This outline of the origins and nature of the Woodland Culture now sets the stage for the presentation of the archaeological record of the Late Prehistoric peoples in our study area. While this record may appear to be static and understandable as a neat series of tribal movements into and out of Southern Manitoba through time, this was certainly not the case. The period is much more complex than a series of events taking place one after

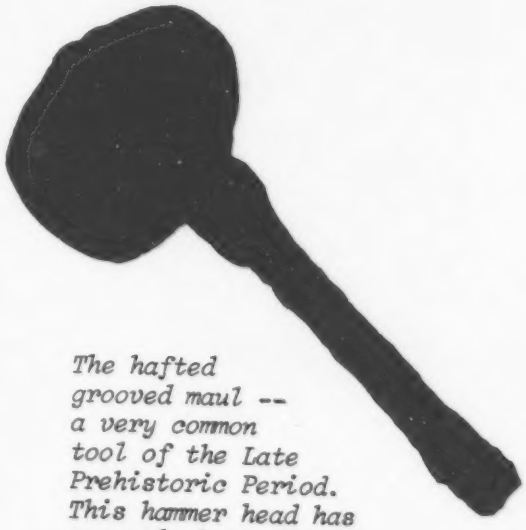
another. Activities such as immigration, marriage between different populations, and the adoption of ideas and materials between groups have led to the considerable diversity found throughout the Late Prehistoric Period. As yet, the details are not understood and require more work on a wide range of problems before they are. Remember that the sources of information for archaeologists -- stone tools, animal bones, climatic information, food resources, and the use of dating techniques -- can only tell part of the story; much will likely never be known. To view these groups of people only through the material remains they left does not do them justice. Clearly, some of the reconstruction of their lifeway relies on the educated imagination of the readers and writers of their story.



*The domesticated dog was most definitely a part of the Indians' "cultural repertoire" during the Late Prehistoric Period in Southern Manitoba.*

The archaeological record does not provide a clear-cut line dividing the Middle and Late Prehistoric Periods. This may be because some of the peoples who inhabited the area before the arrival of the Woodland populations co-existed with the newcomers and may have eventually merged with them, with both groups contributing material and ideas towards a new identity.

One could expect that the introduction and use of ceramics would help to clarify cultural distinctions with the various shapes, construction methods and decorations. Unfortunately, this is often not the case. Rather, the proliferation of pottery has



*The hafted grooved maul -- a very common tool of the Late Prehistoric Period. This hammer head has recently been fitted with a handle.*

added to the number of interpretations of cultural groupings. Until future archaeological investigations provide more detailed information about the ceramic traditions in Southern Manitoba, the cultural groupings of the Late Prehistoric Period are based on generalized ceramic and projectile point typologies. The major complexes of the Woodland pattern in the Late Prehistoric Period are "Besant", "Avonlea", "Laurel", and "Blackduck".

*A Besant point from the Miami area. Natural size.*

The Besant phase, the earliest Woodland expression to appear in Southern Manitoba, lasted from about the time of Christ to 800 AD. Besant projectile points have been found throughout Southern Manitoba, especially in the Rock Lake-Pelican Lake area. Some Besant sites contain pottery with straight plain rims and cord impressions, similar to pottery found to the south and east in the United States. The Besant people were likely nomadic bands who gathered for seasonal communal bison hunts. Although Besant hunters continued to use the atlatl, the bow and arrow came into use during this phase. Besant projectile points were recorded in many collections from the MSTW District.

The Besant people are believed to have immigrated into Manitoba from western Minnesota. Their expansion onto the Canadian Plains was made possible by their participation in what archaeologists refer to as the "Hopewellian Interaction Sphere". The Hopewellians (500 BC - 1000 AD)

were a culturally dynamic population that occupied the American Midwest, particularly what are now Ohio and Illinois. Their highly elaborated and complex mortuary practices called for grave offerings manufactured from exotic materials such as Great Lakes copper, Yellowstone obsidian, Knife River Flint from North Dakota, and Gulf Coast shell. The original Besant homeland of Minnesota placed its inhabitants in an excellent middleman position in the trade network that brought the western exotics, especially Knife River Flint, into the hands of the Hopewellians. By virtue of their association with a culturally and politically sophisticated group, the Besant people took on social and political characteristics that gave them the upper hand in dealing with indigenous groups who stood between them and the natural resources sought after by the Hopewellians. Some of the burial mounds found in Southern Manitoba were built during the Besant phase and are undoubtedly examples of Hopewellian cultural influence.

Eventually, the advantage bestowed upon the Besant people was offset when the indigenous peoples acquired the bow and arrow, represented archaeologically by the small Avonlea points. These revitalized indigenous people and the intrusive Besant population co-existed on the Canadian Plains for several centuries. They appear to have exploited the same resources, characterized by the communal hunting of bison using jumps and pounds, and followed the same settlement pattern of

*Ground and polished stone axes such as this one from near Miami were likely used in cutting down trees in the building of bison pounds. Natural size.*

*Artist's rendition of a Laurel pot based on findings from southeastern Manitoba (above) and methods used in the manufacture of Laurel pots (below).*

seasonal migration of small bands in pursuit of the wandering herds.

A few of the ceramic sherds noted during the MSTW survey have been tentatively assigned to the Laurel Culture, which developed about 2500 years ago in the forests east of Manitoba. The Laurel people were the first pottery makers in the area, using the coil method to manufacture coconut-shaped vessels displaying a range of distinctive decorative techniques. Most Laurel sites in Manitoba are located in the Boreal Forest north and east of the MSTW District. The rare finds of Laurel pottery in the MSTW area emphasize the importance of careful collection management, so that even the slightest trace of a culture that could be so easily discarded as "just more pottery", is preserved and brought to the attention of archaeologists.

The Avonlea phase lasted from 400 AD to 700 AD. The distinguishing characteristics of the Avonlea Culture likely originated in Alberta and Saskatchewan, where earlier sites have been found, and from there they were carried eastward into areas of Manitoba as the population increased. As they did so, the Avonlea people met the Besant people and adopted some Besant traits, such as the making of pottery. The merging of these two cultures, Avonlea and Besant, produced the Late Prehistoric pattern that dominated the region when the first expressions of European influence began to show up in the early 17th century. The former presence of the Avonlea

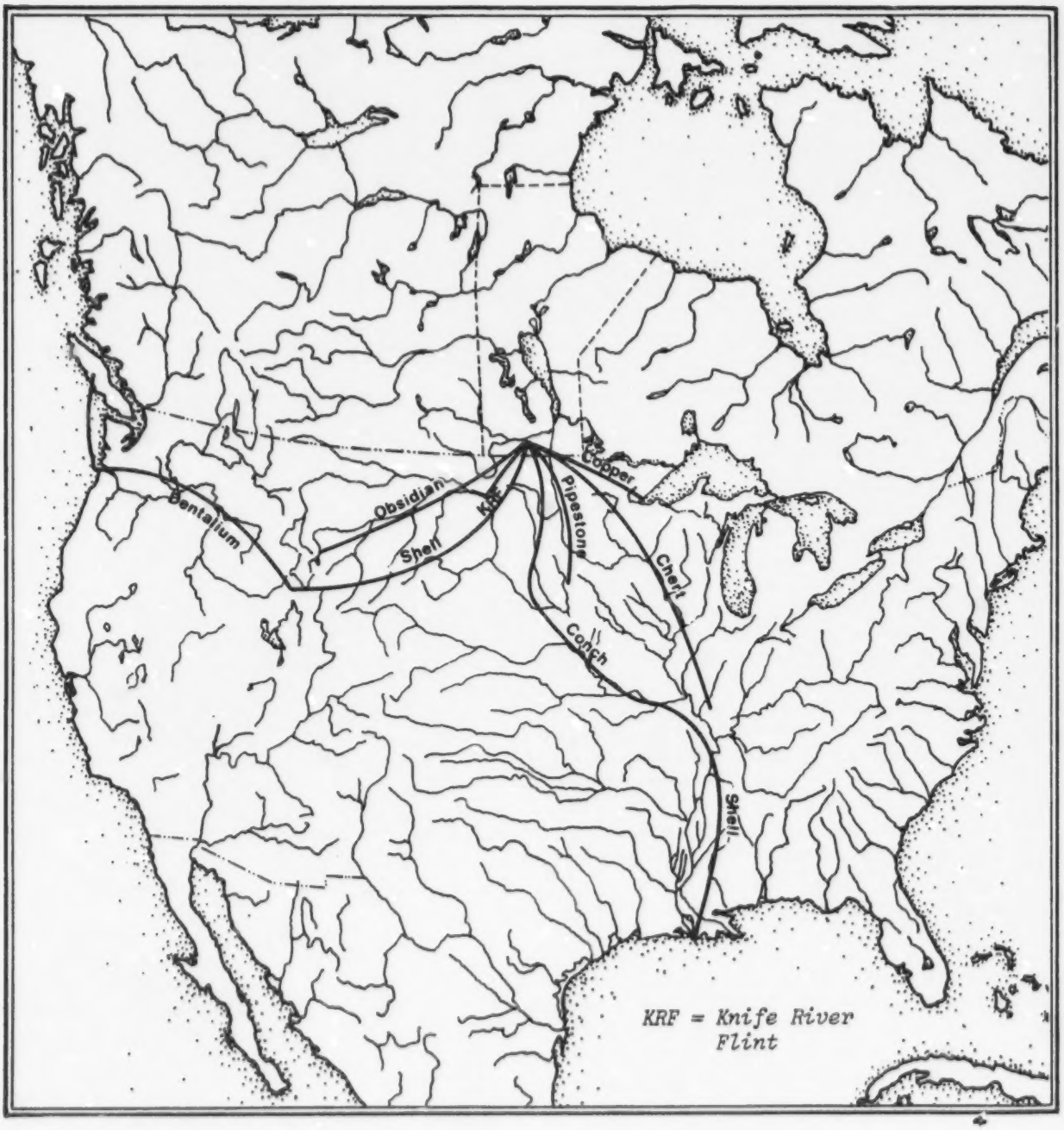
people in the MSTW District was documented in 1982; however, the rare occurrences of Avonlea artifacts would seem to suggest that they did not utilize the District as much as they did the regions to the west.

* * * *

It is apparent that cultural changes in Southern Manitoba during the Late Prehistoric Period were linked to events in other parts of North America. This was certainly the case about 800 AD when the "Mississippian Culture" developed along the river of that name. In the broad valleys of the middle Mississippi, large horticultural settlements were established, based on the cultivation of corn, beans and squash. As village tribes moved into the Missouri River area of North Dakota, nomadic bison hunters and Woodland groups of Manitoba became part of a continent-wide trade network, as had their predecessors as participants in the Hopewellian Interaction Sphere. The people from Manitoba could trade meat and hides for horticultural products as well as exotic items such as "catlinite" (pipestone) from southern Minnesota, copper from Lake Superior, shells from the Gulf of Mexico in the form of masks and ornaments, volcanic glass (obsidian) from Wyoming, and shells from the West Coast. From about 800 AD to early Historic times, there was an influx of groups into Southern Manitoba seeking to take advantage of the bison herds and to trade. These people had adopted some of the

*Laurel rimsherds from the Winkler area. Although rather nondescript in appearance, such findings are nonetheless important indicators of the distribution of Laurel culture. Natural size.*

*An Avonlea point from the Miami area. Natural size.*




*Exotic raw materials that occur in artifact form in Southern Manitoba, and their places of origin, Late Prehistoric Period.*

*A Prairie Side-notched point from the Rosebank area. Slightly larger than natural size.*

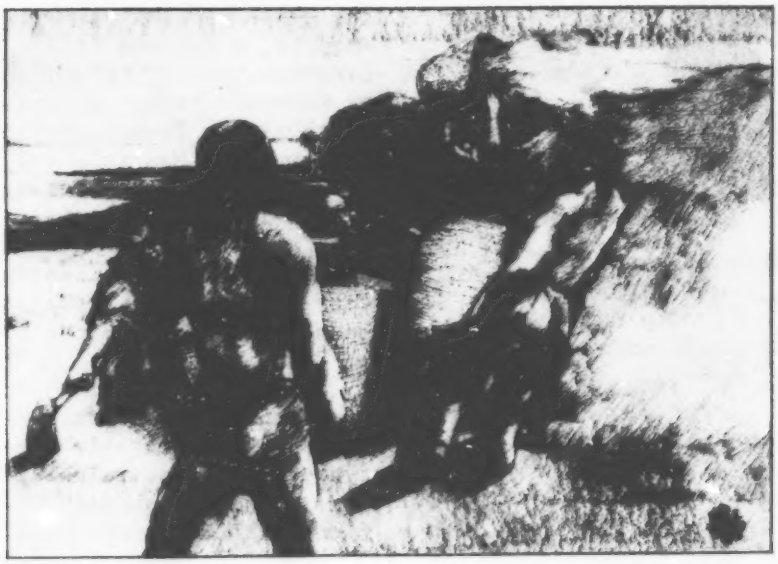
*A Plains Side-notched point from the Winkler area. Natural size.*

*A Plains Triangular point from the Rosebank area. Slightly larger than natural size.*

religious ideas and practices of the Mississippian Culture. For example, a culture called "Devil's Lake-Sourisford" is characterized by sizeable burial mounds in southeastern Saskatchewan, southwestern Manitoba and northern North Dakota dating between 1000 AD and 1600 AD. The Calf Mountain Site near Darlingford is attributed to this complex since many of the above trade items have been recovered from the site.

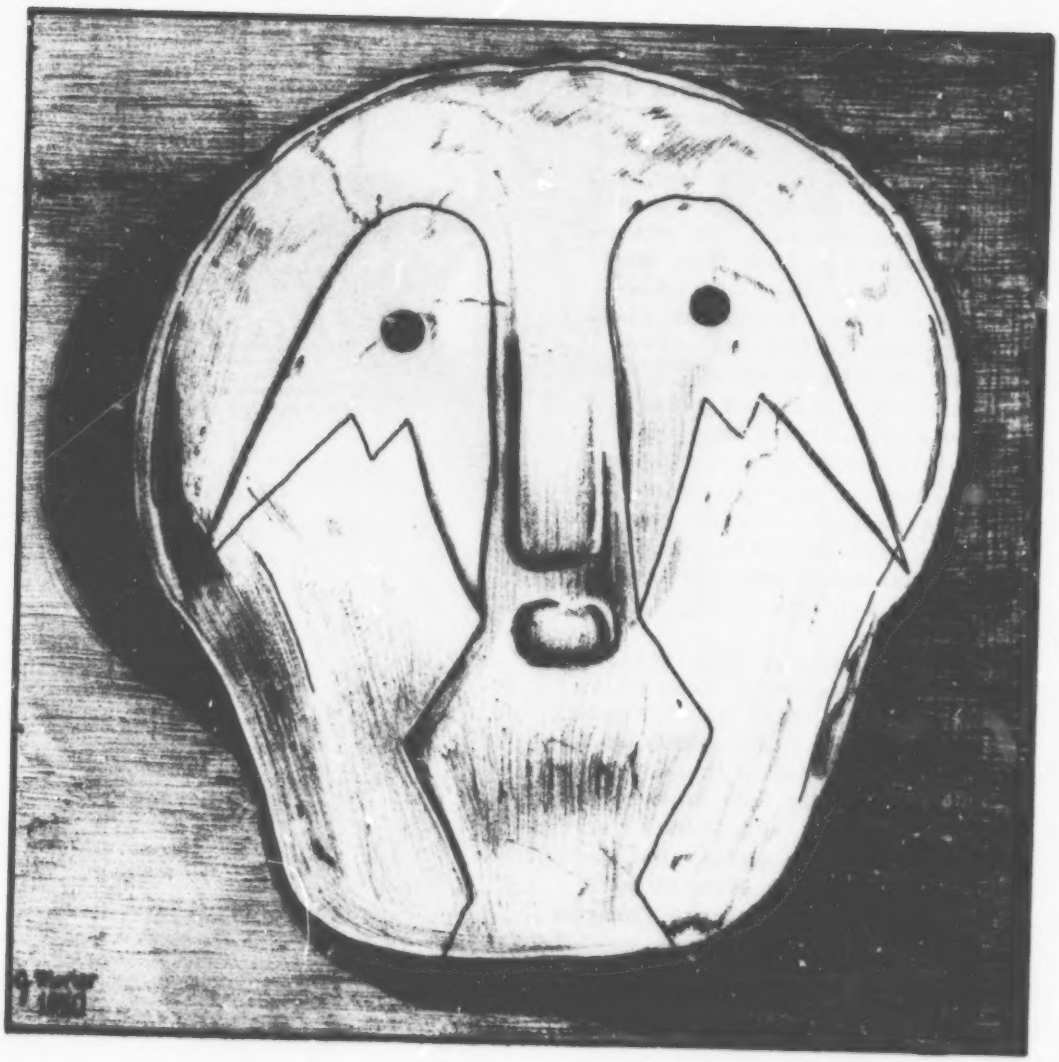
The groups involved in the time from 800 AD to the Historic Period used basically the same types of projectile points, called "Prairie Side-notched", "Plains Side-notched", and un-notched "Plains Triangular". While these points are quite common in artifact collections from the MSTW District, other artifacts such as ceramics are required to distinguish between cultural sub-groups.

The best known pottery-makers who lived in the Aspen Parklands were those we refer to as "Blackduck". These people migrated into Northwestern Ontario and Southern and Central Manitoba from Northern Minnesota. The Blackduck phase lasted from 800 AD to 1400 AD in the Grasslands and Aspen Parklands of Manitoba. The Blackduck people were adapted to the seasonal hunting of bison, but they also consumed deer, wolf, bear, clams and various wild plants. Blackduck pottery is easily identified, but the projectile points are indistinguishable from those of other groups.



*Spiritual beliefs are a universal human trait. What the beliefs are and how they are expressed varies greatly from culture to culture. Many times, religious customs can influence and be adopted by people of another culture. Such was the case in Southern Manitoba during the Late Prehistoric Period. Highly successful agricultural groups centered in the Illinois, Ohio and Mississippi River Valleys developed elaborate religious ceremonies that were adopted, in whole or in part, by many nomadic groups across North America. Part of the expression of these religious customs was the interment of deceased members of the group in earthen mounds, often accompanied by exotic trade goods such as shells, copper items, carved stone objects and funerary pottery.*

*In Manitoba, the Devil's Lake-Sourisford Complex contains expressions of these southern religious traits. In the above drawing, surviving members of a group, under the direction of a headman or chief, are building a mound over a deceased relative. Such mounds are found within the MSTW Planning District.*

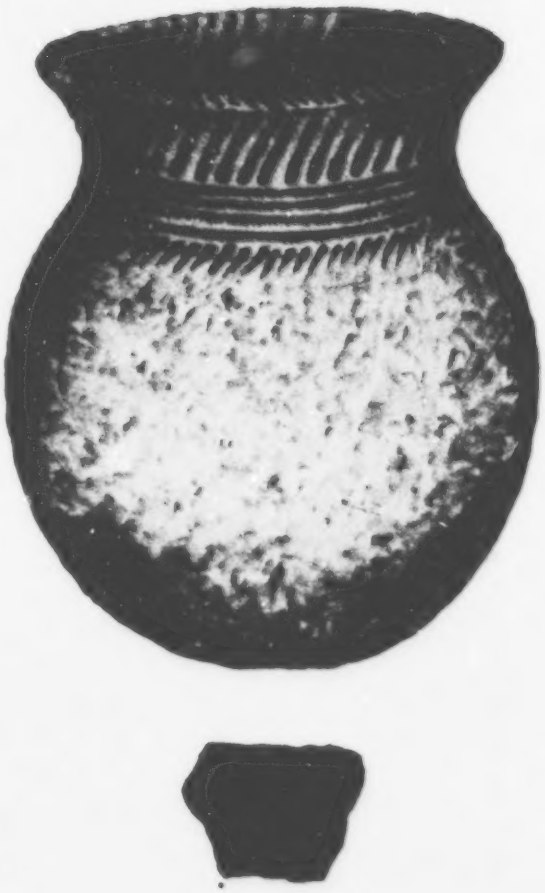


*A shell gorget found just to the west of the MSTW Planning District. The artistic motif on the artifact, and no doubt this particular object itself, originated in the "Temple Mound Culture" of the lower Mississippi River Valley of the United States. The material from which this object was made came from a species of shell-fish that is native to the Gulf of Mexico. The occurrence of artifacts of this nature in Southern Manitoba indicates the far-flung connections the people of this region had with other parts of the continent.*

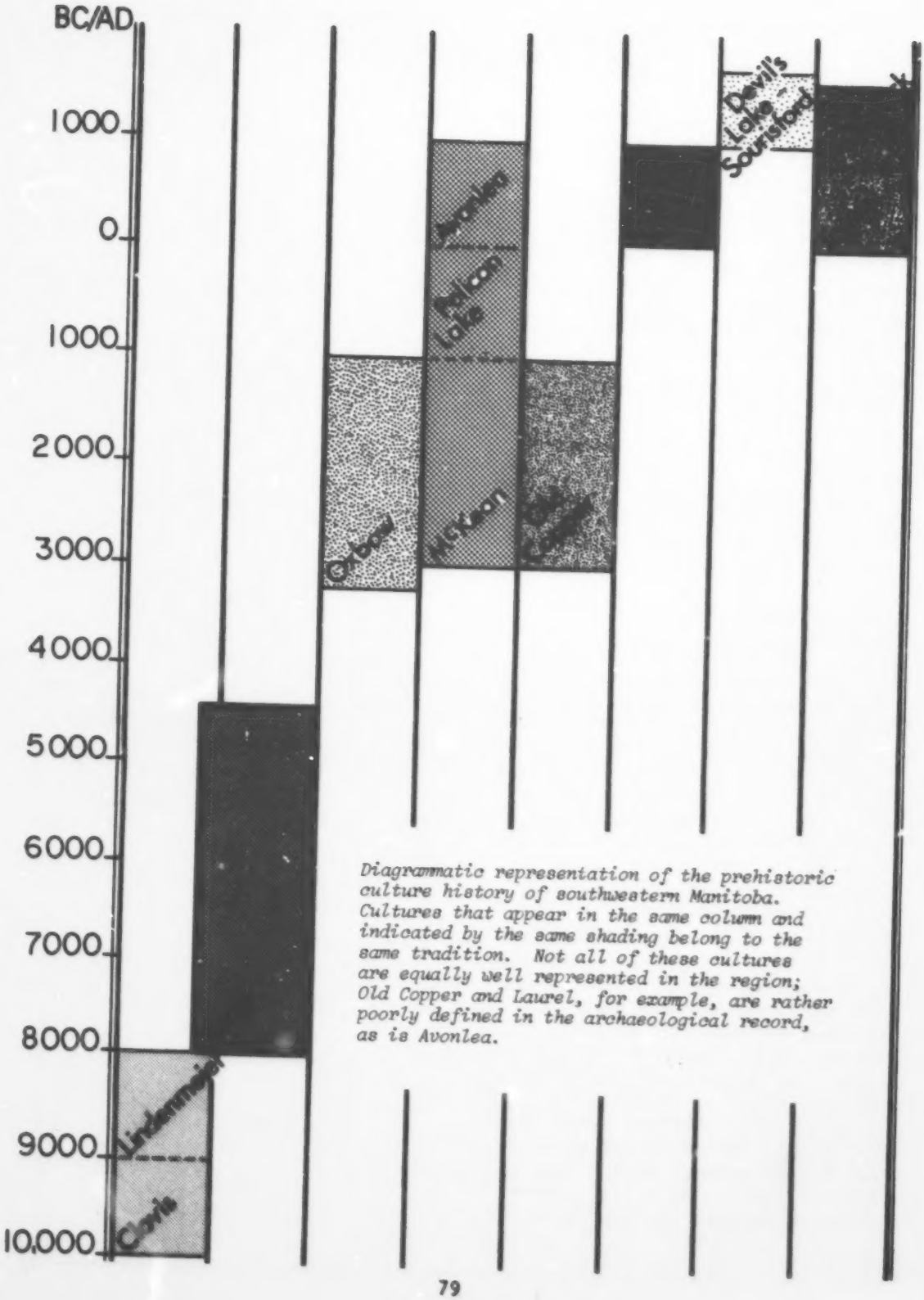
Blackduck ceramic vessels were large, globular vessels used for storage and cooking. Some researchers think they were made inside a twined textile container and decorated around the rim with cord-wrapped sticks. The pot was then placed in a fire that would burn off the textile and harden the clay. Even though the textile wrapping was burned away, the impressions of the material would remain on the finished vessel. Not much ceramic evidence was found during the MSTW archaeological survey, reinforcing the hypothesis that many sites in the area were probably used as winter campsites when pottery making was not practised.

The Blackduck people utilized a variety of material from which they fashioned their stone tools, but Knife River Flint seems to have been favoured. These people also had a highly developed bone tool technology, and smoked "kinnikinnick", a mixture of the bark and leaves of certain wild plants and perhaps sacred tobacco in stone (catlinite) pipes.

One major question facing archaeologists is: Who were the Blackduck people? Some researchers suggest that they were ancestors to the Siouan-speaking Assiniboine Indians who were present when the Europeans entered the area. Others disagree because the ancestral Assiniboine were living further east and south in prehistoric times, and did not move into Southern Manitoba until the 1600s. Another possibility is that the Blackduck people were not Siouan-speakers at all, but rather were Algonquians. This is another



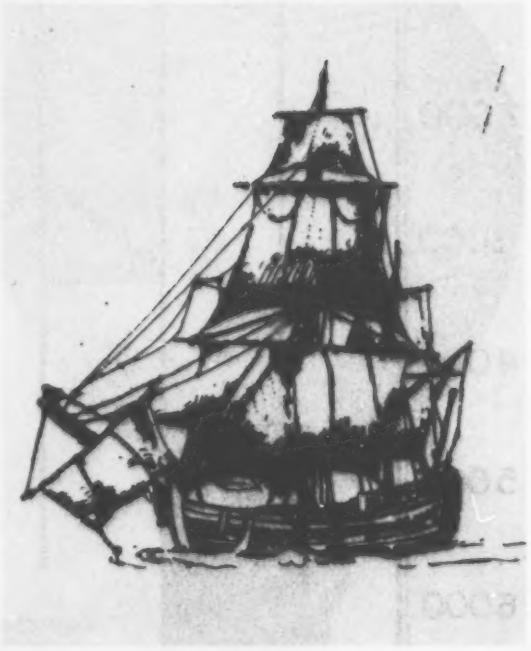
*Above: Artist's rendition of a Blackduck pot based on findings from south-eastern Manitoba. Below: A Blackduck rimsherd from the Miami area (natural size). Note the small hole, or "punctate".*




*Diagrammatic representation of the prehistoric culture history of southwestern Manitoba. Cultures that appear in the same column and indicated by the same shading belong to the same tradition. Not all of these cultures are equally well represented in the region; Old Copper and Laurel, for example, are rather poorly defined in the archaeological record, as is Avonlea.*

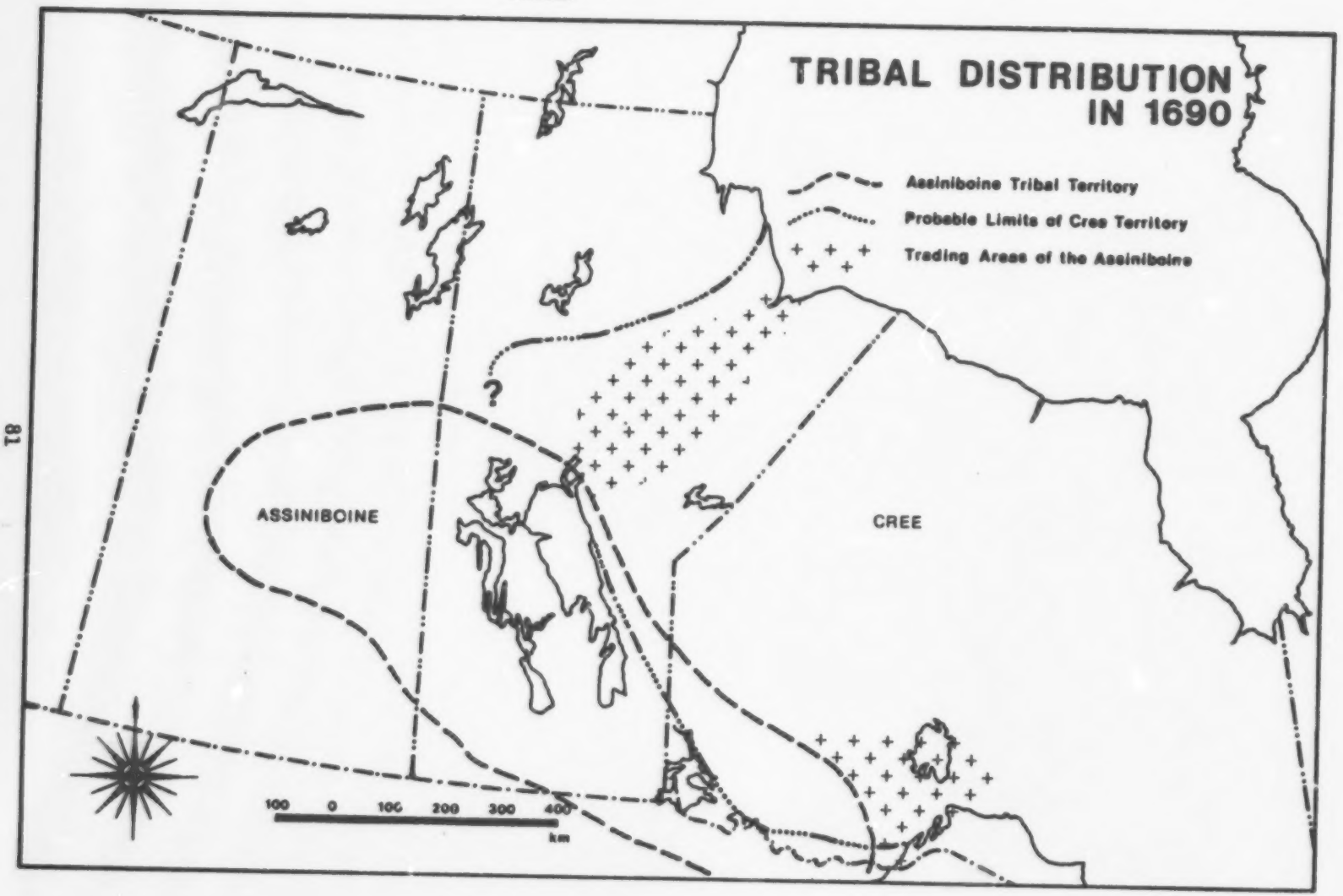
instance of more work needing to be done to solve an intriguing problem.

We are now approaching the period of the arrival of French, British, and Spanish people into North America. At present, archaeologists are not sure whether the Native people occupying Southern Manitoba during, say, the 1500s were still there when the white men first arrived, or were in fact forced out of the area by displaced Native groups from the east. One of the challenges of archaeology is to link the late stages of prehistory to the early stages of the Historic Period.



**Proto-Historic and Historic Periods**

The entry of the Europeans into North America marks the beginning of major changes to the lives of the North American Indians. Contact between European and Native groups was gradual, with the effects varying from group to group. Before the whites penetrated the interior of North America to make contact with Natives of the region, considerable changes had already occurred. Some of these changes were seen as beneficial to the Natives, but others brought disease and chaos to an increasingly endangered way of life. The period of adjustment to the new order is called the Proto-Historic Period. That is, while the effects of the white man's encroachment were being felt, little or no actual contact occurred between the two races.


TRIBAL DISTRIBUTION
IN 1690
Assiniboine Tribal Territory
Probable Limits of Cree Territory
Trading Areas of the Assiniboine
?
ASSINIBOINE
CREE
100 0 100 200 300 400
km

*Here, in the scene of camp life from the Historic Period, many day to day activities are taking place. Women and girls of the band are cleaning and preparing hides for new clothing or tipis. Meat is being hung to be smoked and dried in the sun. Young boys practice the art of archery, preparing for their future lives as hunters and warriors while others play along the banks of the creek.*

*Today, although the people are long gone and part of the scene can only be imagined, remains of some of these activities are still present in the soils of the MSTW area. Tools lost or broken by the people during their work can be studied by today's archaeologist to identify certain kinds of activity areas. While many of these sites have been damaged by modern development, much useful information can yet be gleaned from them. Other sites that still remain as the people left them can add even more to our knowledge of their way of life. What we will eventually know of this past will depend on how we protect our cultural heritage now and in the future. We are presently involved in a race between the gathering of this information and its destruction and loss to both the natural and human forces of today. Once these sites are gone, they are lost forever. If we fail to protect our heritage resources, we will all be the poorer for their loss.*

In some areas, this period lasted upwards of 150 years.

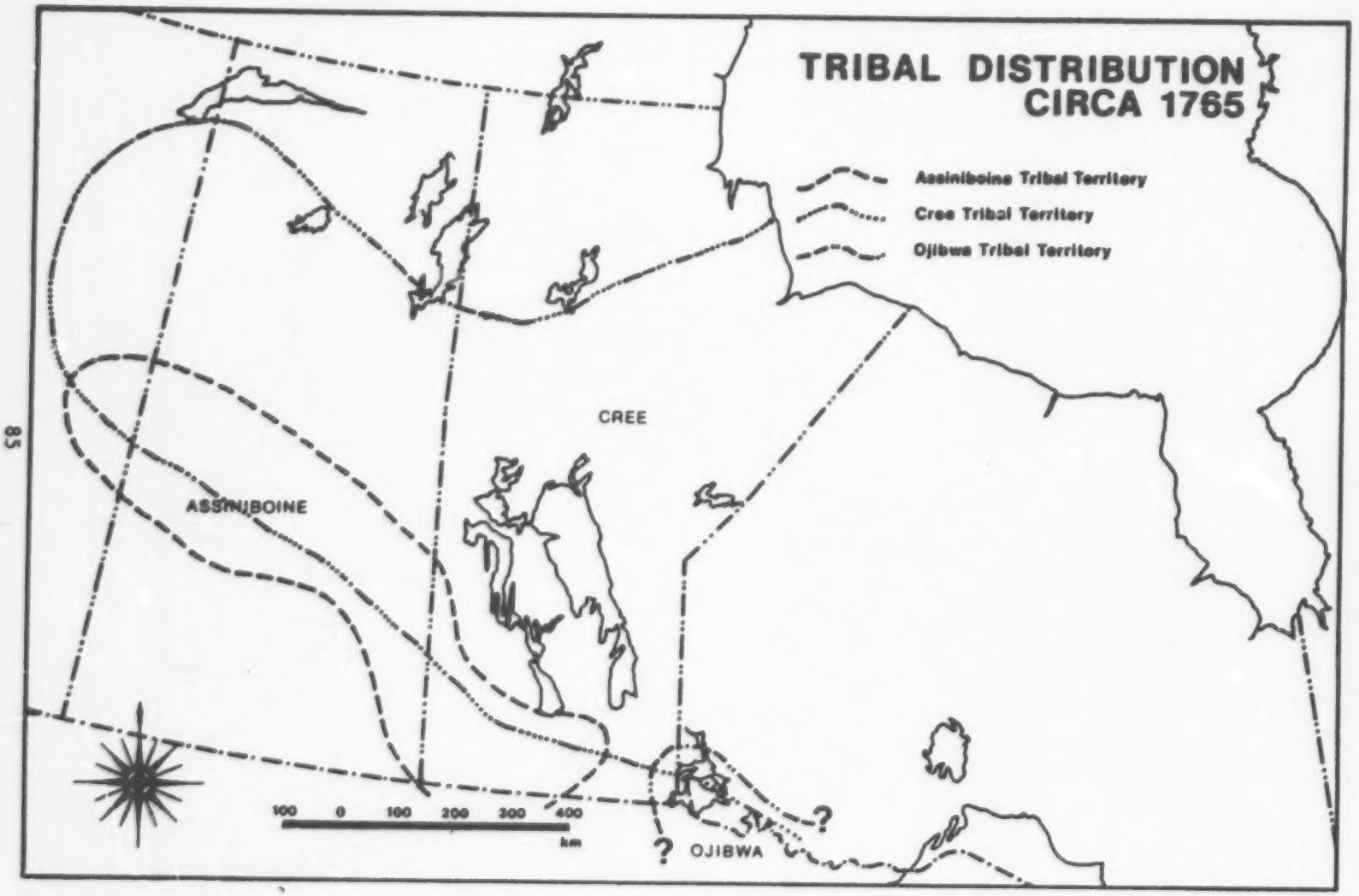
The fur trade was the key factor in dramatic changes of population movement, material culture and the way of life of Manitoba Natives. The relentless drive for furs by French and British traders had far-reaching effects across much of the continent. The Iroquois Confederacy, newly armed by the British and well organized, pushed less powerful Indian groups westward. A "domino effect" led to the movement of more and more groups to the west, eventually reaching Minnesota and Manitoba.

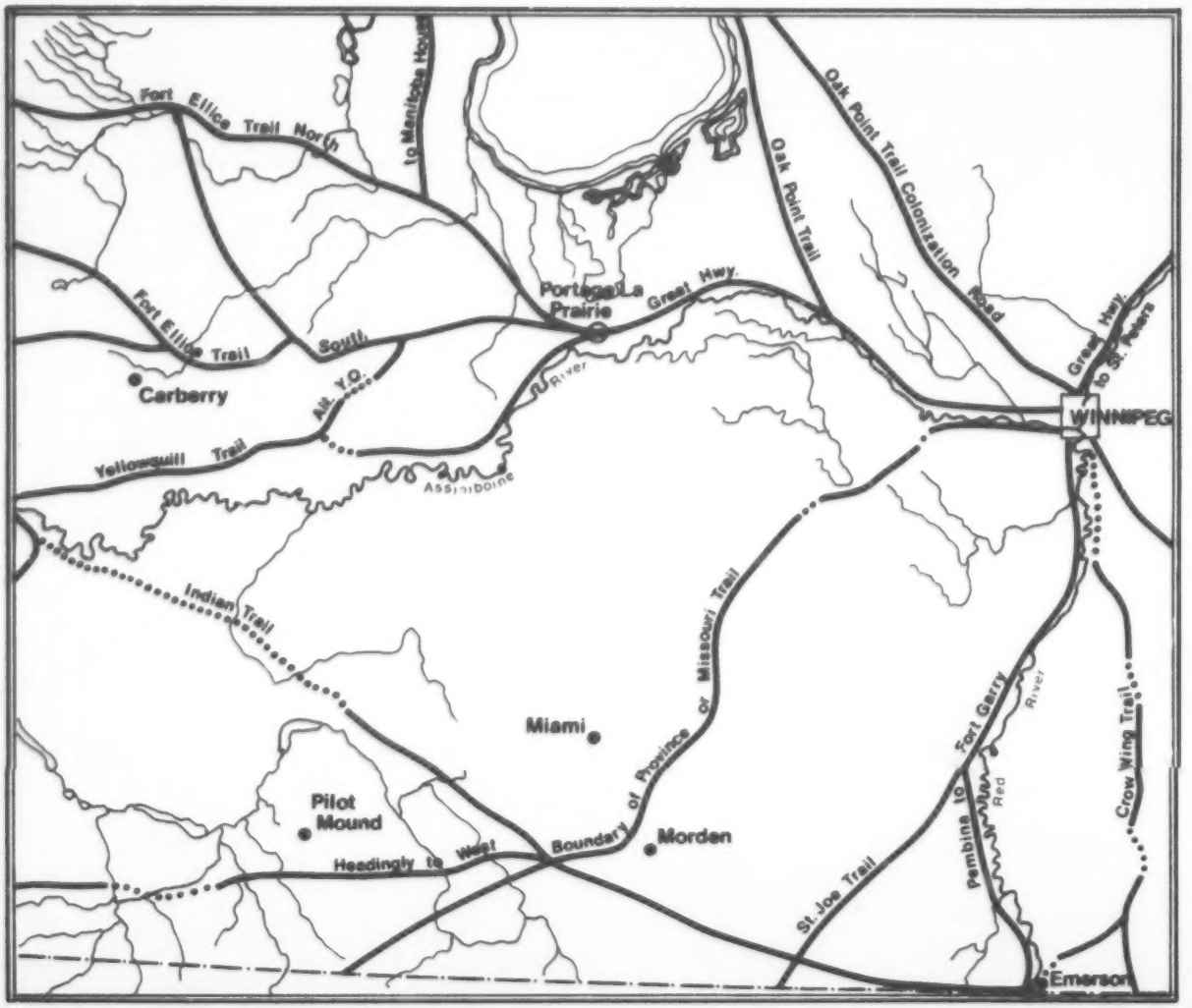
By the 1690s, shortly after the Hudson's Bay Company was established, the Assiniboine were occupying much of northwestern Ontario, Southern Manitoba, and Central Saskatchewan. The Assiniboine made an alliance with the Cree, and both acted as middlemen in the trade of goods to and from early HBC posts such as York Factory at the mouth of the Nelson and Hayes Rivers in Northern Manitoba. These middlemen traded with other Indian tribes further inland to the west and south, taking their furs to the posts on Hudson Bay and returning with trade goods for the other tribes. In their role as middlemen, the Assiniboine profited greatly, becoming well armed and powerful. They became an influential part of the transfer of European goods from one area to another.

The French sent traders into Manitoba in an attempt to compete with the English posts on Hudson Bay in the 1730s and 1740s. The Assiniboine and Cree continued in their role as middlemen until inland posts were established to deal directly with the other tribes.

The first European known to have entered the MSTW District was Pierre Gaultier de Varennes de La Vérendrye. From his journal description of a trip to visit the Mandans along the Missouri River in 1738, it appears that La Vérendrye camped at Calf Mountain, just west of the MSTW boundary. The Quebec-based fur trader and his sons established a series of posts from Lake Nipigon in Ontario to west-central Manitoba. From a post at Fort La Reine near present-day Portage la Prairie, La Vérendrye explored north and south -- north to establish Forts Dauphin and Pasquia, and south to trade with the Mandans along the Missouri River. He likely used the established Indian trails in his journeys, some of which pass through the MSTW District. Portions of these ancient trails can still be seen in the area.

The first Europeans known to have spent considerable time in the Morden area were men from the North West Company's Fort Pembina. The master of Fort Pembina, Alexander Henry the Younger, sent seven men to build a trading post at Pinancewaywining on September 20, 1802. Fort Pinancewaywining,"on the way down to the river crossing", was built along the Assiniboines' route to their bison hunting grounds. The site of the fort was somewhere


TRIBAL DISTRIBUTION
CIRCA 1765
Assiniboine Tribal Territory
Cree Tribal Territory
Ojibwa Tribal Territory
CREE
ASSINIBOINE
OJIBWA
?
?
100 0 100 200 300 400
km




*This accompanying map illustrates the land transportation network in Southern Manitoba during the 1800s. Many of these trails likely followed earlier ones developed by the Native population. Later, they were used by the fur traders and eventually became the routes of the first settlers and farmers in Southern Manitoba. While the railway diminished the importance of some of these routes, others have developed into the major highway systems of present day Manitoba.*

just to the east of what is known today as Dead Horse Creek. The trail used by Henry's men to reach Pinancewaywining was an old Indian trail later known as the Emerson, Settler's, or Boundary Commission Trail. This trail was one of the two major routes in the MSTW District, leading from Fort Pembina to Calf Mountain. Because this post was reached by land, Henry devised a new form of transportation to supply Pinancewaywining:

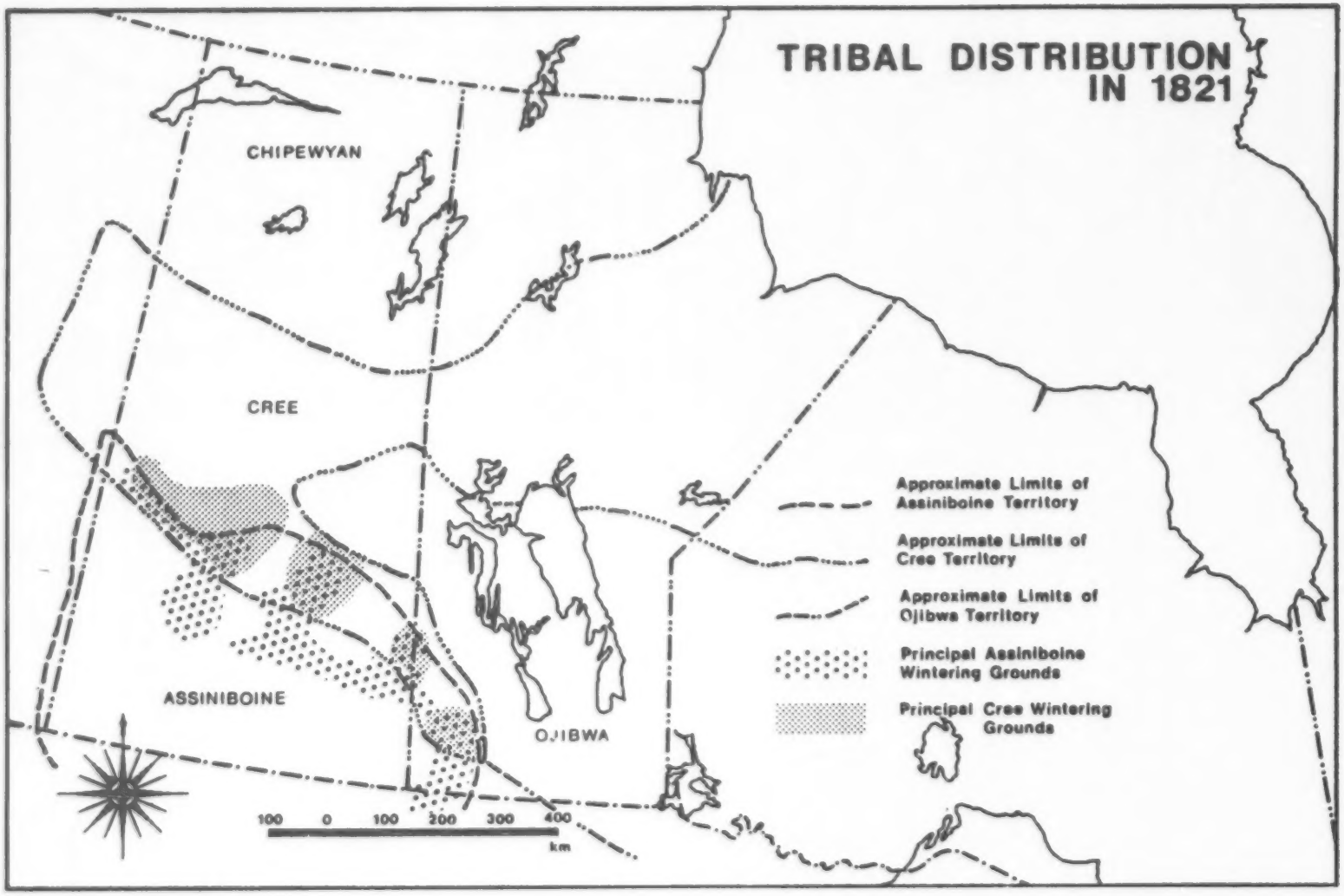
> ... a new sort of cart which facilitates transportation, hauling home of meat, etc. They are about four feet high and perfectly straight; the spokes are perpendicular, without the least bending outward, and only four to each wheel. These carts carry about five pieces, and are drawn by one horse (Coues 1897:204-205).

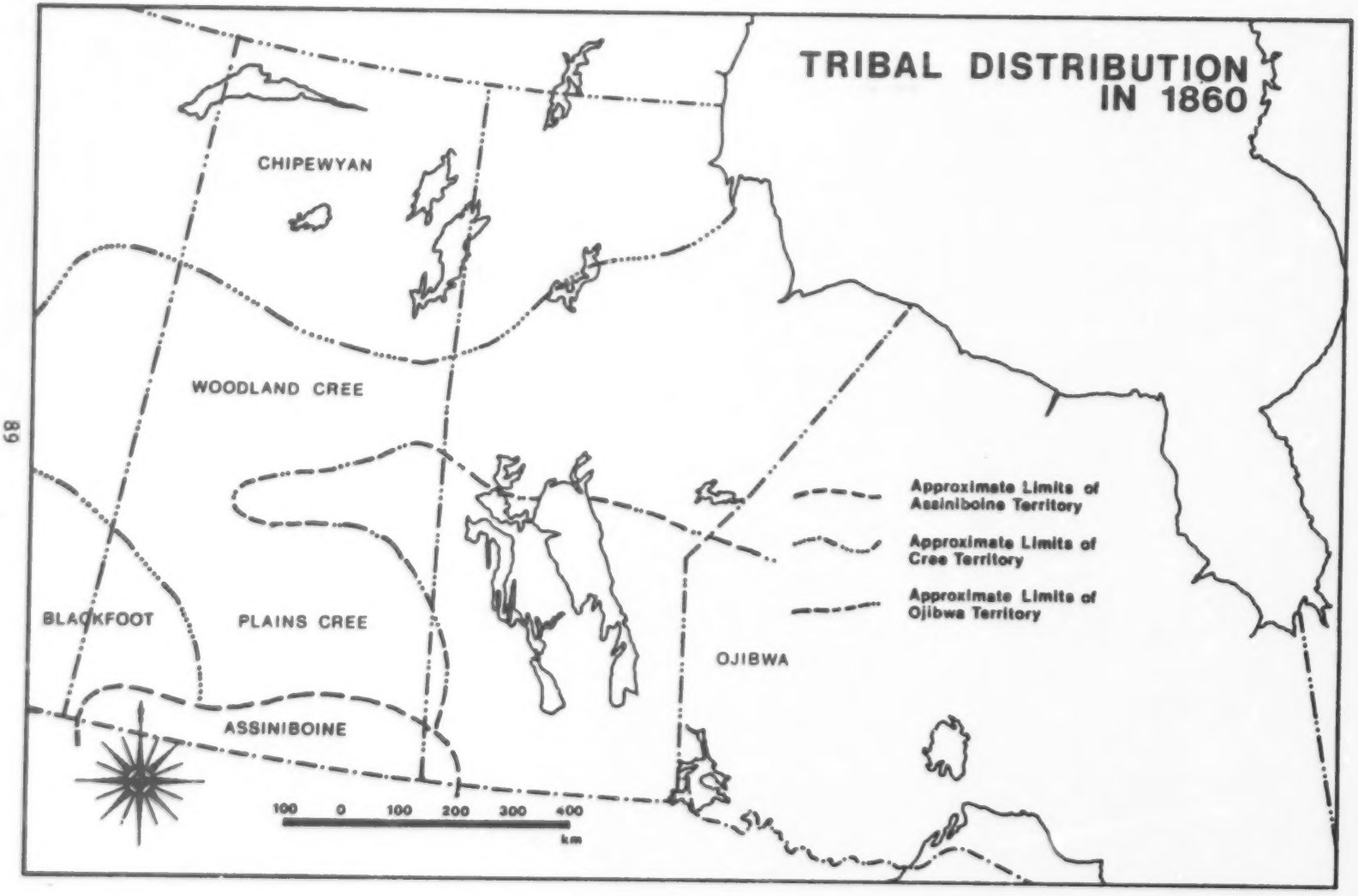
These were the prototypes of the Red River carts, famous in Manitoba history.

While the trading post at Pinancewaywining is sometimes called a fort, this label is somewhat misleading because it brings to mind a picture of several buildings with a fortified pallisade around them. Pinancewaywining was probably nothing more than a single log cabin that was only occupied for one or two years and then abandoned. This is not an attempt to reduce the historical significance of Pinancewaywining, but is presented to show that it is doubtful that any substantial structural remains would be preserved. The precise location of Henry's post has not been determined. Estimates vary from 3.2 to 8.0 kilometres southwest of Morden on the banks of Dead Horse Creek. While the MSTW archaeological survey crew did locate the place where the Boundary Commission Trail crosses Dead Horse Creek, we did not find any evidence from the fur trade period. Fortunately, the Pinancewaywining post does not seem to be under the waters of Lake Minewasta, as had been previously thought. A more intensive survey of the area near the Boundary Commission ford may solve the problem.

Although European settlement did not begin in the MSTW District until the 1870s, the area was not deserted until then. Without a doubt, some Europeans or Métis settled within the District before that time, but it was not until after Manitoba entered Confederation, and after the land survey of 1872, that the District was opened to agricultural settlement. The MSTW District fell within the County of Dufferin, divided into North and South sections. Mountain City was the county seat of South Dufferin and Nelsonville the county seat for North Dufferin.

Nelsonville grew up around the saw and grist mills established by Adam Nelson Sr., in 1877. Land for the fast-growing village came from the holdings of A.D. Stevenson, J.C. Smith, Sarah Tisdale, and W. Duncan, all early settlers in the area. By 1880,


TRIBAL DISTRIBUTION IN 1821
CHIPEWYAN
CREE
ASSINIBOINE
OJIBWA
Approximate Limits of Assiniboine Territory
Approximate Limits of Cree Territory
Approximate Limits of Ojibwa Territory
Principal Assiniboine Wintering Grounds
Principal Cree Wintering Grounds
100 0 100 200 300 400
km


TRIBAL DISTRIBUTION IN 1860
CHIPEWYAN
WOODLAND CREE
BLACKFOOT
PLAINS CREE
ASSINIBOINE
OJIBWA
Approximate Limits of Assiniboine Territory
Approximate Limits of Cree Territory
Approximate Limits of Ojibwa Territory
100 0 100 200 300 400
km

nearly a thousand people lived in the vicinity of Nelsonville, which had stores, hotels, a newspaper, schools, a land office, and doctor's and lawyer's offices. The town incorporated in 1882 in anticipation of the Canadian Pacific Railway passing within the municipal limits. Mountain City, about 16 kilometres south of Nelsonville, was adjacent to the Boundary Commission trail and also thrived on the speculation that the rail line would pass through its boundaries.

However, the Canadian Pacific Railway by-passed both Mountain City and Nelsonville. After reaching Stephen in 1882, a point 5 kilometres east of present-day Morden, the builders decided to establish their station farther west to take advantage of the more reliable water supply at Cheval (Dead Horse) Creek. The chosen site belonged to Alvey Morden who had moved to the area in 1874 from Walkerton, Ontario. Eventually, Cheval Creek was re-named Morden, in honour of its first citizen. Neither Nelsonville nor Mountain City could expect to survive the inevitable shift of business and commerce to Morden in response to the establishment of the railroad station there. Consequently, both towns were closed down completely, with houses and entire commercial properties being moved to Morden.

The first settlers of the MSTW District, who were mainly of Anglo-Saxon origin from Ontario, chose the western portion of the area for their homesteads due to the ready supply of water and wood along creeks flowing off the Escarpment. The eastern area of the District, however, was settled by German-speaking Mennonite farmers from Eastern Europe. Two reserves, one east and one west of the Red River, were set aside for these immigrants. The eastern-most portion of the Planning District comprises the western half of the West Reserve. The Mennonite settlers did not hesitate to farm the open prairies, establishing nearly two dozen communities, or "draps". Although many of the original villages disbanded, several have remained intact after nearly a hundred years.

Contemporary towns in the District can be attributed to the effect of rail transportation entering the area. In addition to Morden, Winkler and Thornhill owe their existence to the Canadian Pacific Railway. Winkler received its rail line in 1882, with the town situated to service the many Mennonite villages in the region. Thornhill was surveyed in 1882 in conjunction with the new rail line and the opening of a telegraph office. By 1888, a passenger station was built. In a similar fashion, the arrival of the Canadian National Rail line in the northern part of the District in 1889 stimulated the growth of Miami and Rosebank.

## Epilogue

We are now fairly sure that Southern Manitoba has been occupied continuously by human beings for at least 12,000 years. Unfortunately, this story is very poorly known and of course we want to improve our knowledge in any

*Glass and ceramic artifacts from the abandoned townsite of Nelsonville. About 2/3 natural size.*

way we can. The information we require to do so lies on and under the surface of the ground in the form of archaeological sites; and we have to study these sites to retrieve that information. There are ways and means of doing this, but we obviously cannot study all of these sites at once, and so we study what we can and attempt to preserve the others for when the opportunity arises.

It is the position of the Manitoba Government that this 12,000-year-long human history is part of the heritage of all Manitobans, and hence the government has a responsibility to ensure that the archaeological sites and objects are used to the benefit of all. Legislation has been enacted so that we will have the opportunity to learn of findings that may prove useful in the writing of Manitoba's prehistory. It is a fact that most of the archaeological sites that have been scientifically studied in Manitoba were originally found by local people and reported to the authorities. In 1983, the Province published a 225-page book entitled Introducing Manitoba Prehistory. The fact that we were able to do so in the first place was largely because of the studies made possible by these findings and the assistance of co-operative local people in reporting them to us. The province is just too big and the number of archaeologists too small to survey the entire area themselves. A partnership between the public and the archaeologist is absolutely necessary if we are to learn more about the prehistory of Manitoba.

One of the central purposes of the legislation is to ensure that the removal of objects from the ground is done in a proper fashion, since it is not only the artifacts themselves, but also the information we can get from them, that is of prime importance. If the field work is not done carefully, that information may become lost to us. One of the real problems with archaeological sites is they are "non-renewable" -- once they are disturbed, they are disturbed forever. So we have to do it right the first time. Even in places like plowed fields, where disturbance has already taken place by the farm machinery, it may still be possible to note how different objects cluster together, and this may comprise an important piece of information to the archaeologist who wants to "interpret" that site for posterity. If all such findings and studies are duly reported to a central agency, such as the Historic Resources Branch, the results can in due course be included in a book like Introducing Manitoba Prehistory for the benefit of everyone. That is the basic philosophy behind the legislation and the Province's archaeological program.

In closing, we wish to impress upon our readers the fact that most of the story we have told in this book is based on very slim evidence. Thus far, not a single archaeological site has been scientifically excavated and analyzed in the MSTW Planning District. The information we have used to develop the above is drawn largely from places outside of the

District, with many of our conclusions being based on geographical, historical and anthropological, rather than archaeological, information. The archaeological record thus far accumulated from the Planning District comprises 100% surface finds, and these alone cannot be expected to reveal all there is to know about the region's prehistory. It remains to "anchor" all of these surface finds with carefully excavated, radiocarbon-dated sites within the Planning District -- clearly a job for the future. It is hoped that we have convinced our reader that a fuller and more complete story remains to be told -- provided the sites are still there when the opportunity arises to study them. To ensure that such will be the case, we ask the citizens of the Planning District to assist the Historic Resources Branch in its efforts to preserve and protect the archaeological heritage of the area. A good way to commence your involvement in this interesting and important work is to obtain a copy of the book Introducing Manitoba Archaeology and reading it carefully. This book can be obtained free of charge from:

Archaeology Section
Historic Resources Branch
3rd floor, 177 Lombard Avenue
Winnipeg, Manitoba
R3B 0W5

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